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★ The Schools in the National Emergency — *Exton*

★ Question Without Answer — *Moehle*

★ The Problem of Larger Classes in Public Elementary Schools — *Gragg*

★ Teacher Supply, Tenure Legislation, and Dismissal Action — *Romine*

★ Summertime Was a Busy Time in Indianapolis Schools — *Barnhart*

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A Periodical of School Administration

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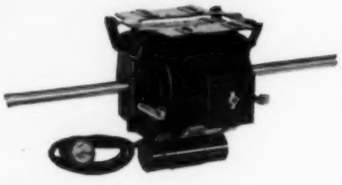

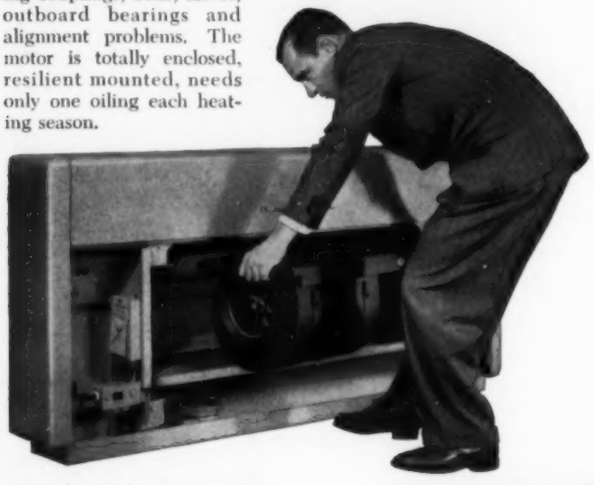

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THE AMERICAN
School Board Journal

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If War Should Come —

Question Without Answer

*John H. Moehle**

The other day, I was about to leave one of the rural schools under my supervision, when a 14-year-old boy asked me this question. "What would the kids do if the Russians dropped an atom bomb near the school?"

The inquiry so startled me, I asked him how he ever thought of such a question. He told me the pupils listened every noon, during the lunch period, to a news broadcast and a commentator had been discussing the Russian development of the bomb a few minutes before my arrival. His query stopped me cold and because I couldn't think of an intelligent reply, I promised some kind of an answer after I'd thought about it.

As I drove away from the school, I decided to forget the boy's question and concentrate on the beautiful weather, but, somehow, it kept returning to my thoughts. Gradually, my trend of thought broadened out into a whole series of disturbing questions. If such a ghastly thing happened, what would school children do? What would happen to them? How would they respond to such a terrifying occurrence? Should something be done to condition their thinking for the grim eventuality of atomic warfare? Was it my responsibility to worry about it? Whose responsibility was it? Would people think me crazy for thinking out loud about the problem? Hell, why did the youngster ask *me* the question?

But he did.

Answers to such perplexing questions cannot be supplied without constructive thinking, but before contemplating any of the problems at all, I asked myself, "Could it happen?"

I think it could.

Are the Children Considered?

With such a possibility before us, it seems someone should start thinking about it *now*. Why *now?* Simply, because World War II taught us the best time to consider precautions and preparations for an eventual crisis is *before* it happens, not *after* it's happened, unless we can afford panic and chaos. So, without becoming victims of hysteria, we should refuse to continue nourishing pleasing illusions and proceed with the greatest haste to prepare for the worst. If the worst never comes, at least we can say we were prepared, but, most of all, any plans made before a crisis would reflect careful judgment and common sense rather than hastily drawn plans formulated under pressure.

Sound logical? To support such logic, it would require an enormous amount of time to plan intelligently because the whole problem is so vast. If we lack the necessary forethought, we might witness in this country a repetition of the pitiful spectacle European children presented during World War II when they wandered aimlessly, hungry and homeless, sick and maimed. Therefore, we must overcome a disinclination to face such an unpleasant fact and begin to plan for such eventualities.

A Few Proposals

The thought of atom bombing or guided missile warfare is appalling and perplexing to me, as an individual. However, some basic proposals would seem to be in order, so I'd like to make a number of recommendations.

A commission could be appointed by the Federal Government and each state government to study conditions and circumstances confronting public schools in time of actual atomic war. Such a commission could be composed of men and women representative of all types of schools, ranging from the large city school to the small rural school. With a representative cross section of such people, the field of thought would be given a more thorough treatment. It would allow the individual members to think in terms of the situation they represent. When these commissions have acquired adequate knowledge, pamphlets and bulletins could be distributed to all public school officials.

Medical information could be written in nontechnical language on the effects of radioactivity. In no department of atomic fissions explanation (or lack of it) to the public has the information been more confusing. Proper protection is the answer, no doubt. But who of us knows much about it? Such information could be distributed to our schools. Teachers could instruct the children in this simple language in First Aid and Health classes.

A Master Plan for Evacuation

Architects, in the process of planning new construction, could be made to incorporate features in these buildings to provide maximum protection in the event of atomic explosions, if the architects could be given information.

A master plan could be arranged for orderly evacuation for children in congested areas to localities sparsely populated and, at the same time, preparations could be made for the reception of these children in the areas where they are to be located. These plans would include housing and feeding these children in areas of safety and provision for them to continue their education with as little interruption as possible.

*Principal, Central School, Phoenicia, N. Y.

Schools located in especially dangerous areas could have drills, similar to fire drills, to evacuate school buildings, *if evacuation is the proper procedure,* and if not, places of refuge should be established for these children to protect them in the event of a raid. Will they hide under concrete, or simply lie flat, or seek high hills and buildings?

A permanent plan could be organized to provide asylums for homeless and orphaned children. The bomb dropped on Hiroshima killed 80,000 persons. No one can shrug off those figures nor the enormous problem of what would happen to orphaned children in this country in such a situation.

An over-all study could be made to determine the facilities for conversion of schools into hospitals and community first aid posts.

Give School Boards Authority

Boards of Education could be given the legal right to spend money for providing adequate protective measures as soon as their knowledge is sufficient to justify such expenditures. Good business practices could be set up for supplying necessary protective measures. Costs of any protective measures should be installed with as much economy as possible, yet, at the same time, the insurance of satisfactory protection should be primary.

Teachers could be taught how to operate a Geiger-Counter and Radiac,[1] if such instruments are the ones they should learn to operate.

A nomenclature of atomic terms could be published so the public can understand the meaning of the basic words connected with the whole atomic energy program. By this, I mean words used daily, such as "radioactivity," and "radiation." There would be less fear about the whole atomic program if there were less ignorance. The more atomic vocabulary the average person possesses, the more confidence he would show in relation to the whole program. As it is now, the terms are bewildering. If it violates security to tell people the facts, then facts should be withheld, but, at least we could be assured we could and would be told when the proper time comes.

Is it necessary to keep the public in complete ignorance until someone drops a bomb or is it time for enlightenment? If such ignorance exists among the adult population, what can we expect from the children? Secrecy about the bomb has now become ridiculous. The Russians have the bomb — and our own people don't know what the Russians obviously know. Phooey on such secrecy. The trends of recent years of "the government knows best" will keep us in ignorance unless enough persons squawk loudly enough to demand a lifting of the atomic curtain where "military secrecy" is obviously a phony excuse for either stupid censorship or simple inability to make reasonable decisions. This nation, with the highest educational standards for the most people, ought not to treat its citizens as morons. Morons, in an atomic war, can burn to a crisp for a lack of knowledge.

In the meantime, the question, "What would the kids do if the Russians dropped an atom bomb near the school?" deserves an answer. I can't answer it. Can you?

[1]Radiac is a new type of radiation detecting and measuring device suitable for both military and civilian defense use — announced October 8, 1949, *New York Herald Tribune.*

Students Hear From Businessmen —

A Career Day as Public Relations

*Bess Day**

"This has been a beautiful job of public relations well done. I congratulate you." These were the words of the superintendent of schools to the director of guidance at the close of Career Day. She thanked him graciously, but it was obvious that the phrasing of his compliment had stunned her. So, it was a job of public relations! Why had she had Career Day? All during the preparations for the day the purpose of the project had been described as "an attempt to inform boys and girls about different vocations in a way that the school cannot inform them in an ordinary day." But, was that the only purpose of the day? Would not the director have been a bit disappointed if her superintendent had said only, "Well, the day has been a success. I am sure each student knows a lot more about two fields of work than he did yesterday"? How did Career Day happen anyway? What caused the superintendent to view it so clearly as a day representing "a beautiful job of public relations well done"? The events leading to the day itself answer these questions.

*Director of Guidance, Michigan City Public Schools, Michigan City, Ind.

Future Auto Mechanics hear from Mr. "Bill" Wilson, automobile representative and successful salesman.

Late in November, 1949, one of the town's busiest industrialists found his way to the guidance office to explain that he was chairman of the Rotary Committee on Vocational Education. The members of his committee wondered if they might serve the school in some way. He thought, perhaps, the various members of his club might come to the school from time to time to confer with boys and girls who had indicated an interest in particular fields of work. Would the school like their services? The whole approach was gratifying. The school was not asking help; someone was offering help. It was explained to the school's guest that the matter would be given careful thought in order that the

Mr. Milton Kemp, chemical research director of a local manufacturer, spoke to an interested group about the very practical opportunities in the chemical industries.

services he offered might best be utilized. To have a busy professional or businessman come in to talk about his work without some organization on the part of the school just didn't make sense.

The Program Developed

The director of guidance prepared a sketchy outline for the perusal of the superintendent and high school principal. Approval was forthcoming, for what administrator can fail to see the wisdom of using the talents of an important community group which wants to serve the school?

A Career Day Check List was given to each student in high school. The list was comprised of 80 fields of work. Each student was asked to check his first four preferences if it were possible for him to have information concerning these vocations from people who are now successful in the fields of work. From the results of this survey, 36 different vocations and professions were chosen as subjects for vocational information classes on our Career Day. Would the club be willing to furnish guest teachers for classes in these chosen fields? Each teacher would be expected to meet two classes so that each student might have an opportunity to learn more about two fields of work.

The whole idea provoked great enthusiasm with the Rotary Committee. But, they frankly voiced their doubts about the possibility of getting busy men to give a half day to such a project. The committee arranged for the director of guidance to be the speaker at a Rotary luncheon meeting. At that time the director talked in general of the guidance program. She explained the plans for a Career Day and emphasized the need for co-operation if the project were to be successful. The various guest teachers were then chosen from among the club members to act as informant in one of the chosen fields of work. Several of the vocations, like nursing and beauty work, could best be represented by women. In some instances the men enlisted the services of their wives or secretaries. But never, in any case, did the men hesitate to choose someone in no way related to the club where the help of an "outsider" seemed needed. In two fields the club secured representatives from nationally known organizations in Chicago.

The "Teachers" Are Briefed

A preliminary meeting for briefing the guest teachers was held a month in advance of the day set for Career Day. All guest teachers were given outlines made up of questions most often asked by teen agers about vocations. These teachers were told they could conduct their classes in any manner they chose; the outlines were merely as suggestions. The seriousness with which each person set about his preparations for his day of "teaching" was indeed gratifying. Not only was each individual organizing conscientiously what material he could draw from his own wealth of experience, but many were using the files of the state employment office and public library for data on placement and prediction figures in their respective fields.

Everything seemed in readiness for the event when the schools were closed because of the lack of coal. What would happen to Career Day, which was to have been the week later? The school paper and the local newspaper had played up the program; the guest teachers had arranged their personal affairs to fit into the scheme of the whole affair; the students, the teachers, the club — everybody was geared for the day and now it was to be postponed! A new day was set and these busy people juggled their calendars again to fit the needs of this school project. To think that the original date could have been hailed with more enthusiasm is hardly conceivable.

Thirty-Six Nervous Men

On the morning of Career Day, 36 adults left their usual tasks to be "teachers." After a brief meeting for instructions, student hosts escorted the guests to their respective rooms where for the next two hours they were to conduct their classes. The student host introduced the guest teacher to the group of boys and girls who had indicated an interest in the teacher's particular field of work. Most of the teachers had prepared rather formal talks, following the outlines given them; then, the remainder of the hour was given to the many questions the boys and girls wanted to ask. At the sound of the bell the groups disbanded and went their various ways to meet with another guest teach-

Mrs. Harold Olsen, interior decorator and color expert, impressed her group with the career opportunities in fabrics.

er of their choice. The regular high school staff was free to visit these classes taught by a doctor, lawyer, engineer, decorator, salesman, mechanic, beautician, homemaker, accountant, photographer, farmer, or others.

At the luncheon meeting of the Rotary Club on Career Day, the members of the board of education, the superintendent, the high school principal, the counselors, the guest teachers, and two students were guests. The program was a panel discussion between the two students and five guest teachers. The director of guidance acted as moderator. Experiences of the morning were shared. Reactions were most interesting. The students loved "getting out of classes," of course; but, more seriously, they valued the opportunity to hear firsthand information from people who are successful in the fields in which they were interested.

Both students and teachers (guest and regular) expressed the feeling that the number of classes each student might attend should be increased another year. One of the rewarding comments was that of a busy professional man who said, "I'm so glad I helped. You see I've been all wrong about these kids. I see them downtown acting just plain crazy — as if they never have a serious thought. Well — those questions they fired at me were most penetrating. It's good to know they're not like I thought they were."

Will Day Be Repeated?

Follow up? Yes, with questionnaires to students, guest teachers, and staff members. All want to repeat the project. There were suggestions for slight changes: more classes, more questions from students in advance, names of possible guest teachers, more emphasis on semiskilled and unskilled jobs, etc. Many of the guest teachers volunteered to serve as individual vocational consultants for interested boys and girls.

How was it the day had turned out so well when it seemed doomed to fail in view of postponement? The local newspaper deserves a large share of credit for the success of the day. Almost daily during the ten days preceding Career Day some space was given to the project: guest teachers were interviewed concerning their plans for the day; students were asked about their interests in the project. Every place one went people were commenting curiously about Career Day. On the day itself the staff photographer flitted in and out of classrooms with a reporter. The following day a full page was devoted to pictures and the story of Career Day.

Yes, it *was* a good job of public relations. Seven hundred and sixty boys and girls, in grades 10, 11, and 12, had had an opportunity to learn more about two fields of work of their choices. Thirty-five school teachers had seen 36 busy businessmen and women take over their classrooms for two hours. Thirty-six shaky businessmen and women had felt what it is to face a group of inquiring youngsters for a short period. The school, the club, the newspaper, the whole town had done a job together and the success of the effort had been most rewarding.

Other School Public Relations Ideas

But Career Day was just one of several events which have promoted good public relations in 1950. Every grade, kindergarten through 12, brought displays to the high school gymnasium where the materials were arranged for the public to view. In two evenings, 5000 parents came to see what their children were doing in school. They had time to chat with teachers and hear firsthand just how their children had been coming along. They had a chance to see for themselves the change in the trend of the schools since their own days of book learning.

Then, there was the day the teachers visited industry. How many teachers had been in town for years without knowing the first thing about the factories! Even more profitable than the knowledge 140 teachers gained of 26 industries was the fact that teachers and businessmen alike saw each other in a new light! Yes, people are *human beings* whether they are teachers or businessmen.

The Chamber of Commerce viewed last year's visit to industry with such favor that this year it seemed a good idea for industry to visit education, too. Twenty-two businessmen and industrialists spent a day visiting the various grade schools as well as the junior and senior high schools. A luncheon in the school cafeteria broke the program at midday and gave an opportunity for good informal visiting, which again helps break down the barriers that have been built around school people. The visitors liked knowing just what our schools are doing; they enjoyed seeing just how happy the children are in their natural, informal relationships; they were amazed at how meaningful the day by day work is; and, best of all, they seemed to sense in a new way that the schools really belong to us all.

School time on the air takes the school activities into the homes briefly daily; twice a week longer programs better por-

(Concluded on page 96)

Larger Classes Imminent —

The Problem of Larger Classes in Public Elementary Schools

*William L. Gragg**

The literature currently appearing in educational publications is replete with warnings of alarming increases in school population for a number of years to come. Despite earlier predictions, the continued high birth rate promises to confront us with swollen school populations for at least another decade. The prospect erases, in many instances, the possibility of balancing off large elementary enrollment against small secondary enrollment (and vice versa, the present elementary school population reaches secondary school).

In the event the supply of teachers and school facilities fail to keep pace with the impending growth in enrollment, one outcome is certain — classes are going to be larger. Indeed, this condition has prevailed in many areas during the past two or three years in the primary grades, where the effect of the increased birth rate is already being felt. Valiant efforts are being made to meet the crisis through recruitment of additional teachers and through schoolhouse construction. Whether these efforts will, in effect, keep pace with enrollment trends is open to serious question. There is good reason, therefore, to scrutinize the alternate outcome — large classes.

Other Studies of Problem

Several significant studies of class size have been undertaken, among which are the reports of the Office of Education concerning secondary schools.[1] While these publications deal only with secondary schools, they contain information of considerable import for dealing with the more immediate problem of heavy enrollment in elementary schools.

It is generally assumed that small classes are more desirable than large classes. Increasing class size, therefore, faces initial obstacles in unpopularity, certainly with teachers, and probably with pupils and their parents. Referring to Tompkins' studies, we may clarify the basis for consideration of the problem by defining "small" and "large" classes. In larger (urban) high schools, where classes of 20–39 pupils accounted for 75.8 per cent of the total number of classes in 1947–48, classes of less than 20 were designated "small" and those of 40 or more were termed "large." In elementary schools, most educators would like to confine the limits of "normal" to a smaller range, probably 20–29. Twenty-five pupils are generally believed to be the optimum number to constitute an elementary class; 30 or more pupils represent "large" classes.

The Ithaca Study

In October, 1949, Ithaca, N. Y., a small city with a total pupil enrollment of 4000, had 56 elementary classrooms[2] whose average enrollment was 29.7. Three of the 56 classrooms had 20 to 24 pupils, 22 classes contained 25 to 29 pupils, 19 classes contained 30 to 34 pupils, and 12 classes had 35 to 39 pupils. By our definition, 31 of the 56 groups are large elementary classes.

TABLE 1. Class Size and Teachers' Opinions on Size, Ithaca Public Schools, June, 1950

Number of Pupils	*Actual Class Size**	*Ideal Class Size*	*Minimum Desirable Size*	*Maximum Desirable Size*
1 to 4	0	0	0	0
5 to 9	0	0	1	0
10 to 14	0	1	4	0
15 to 19	4	5	17	1
20 to 24	12	26	28	5
25 to 29	17	23	2	27
30 to 34	24	0	0	20
35 to 39	5	0	0	2
40 to 44	0	0	0	0
No response		7	10	7
Total	62	62	62	62
Mean	29.7	23.9	20.0	29.0

*Includes principals and part-time teachers, represents June, 1950, enrollment. Classes are generally smaller at this time than in October, when school census is taken.

Examination of records over previous years shows that the average size of class is increasing slightly and that the proportion of classes of 30 or more pupils is greater than at any time in the past ten years. The situation in Ithaca probably indicates a pattern duplicated in a large number of other schools.

Out migration from the city to suburban areas has little effect on the situation inasmuch as a large share of the rural youngsters attend city schools by virtue of contracts between the city and the various outlying common school districts. The erection of an additional school accompanied by transfer of nonresident pupils from congested schools will, of course, alleviate the pressure somewhat.

Ideal Class Size

Possibilities of eliminating the trend notwithstanding, the elementary teachers of Ithaca faced the issue with responses to a questionnaire about class size distributed by the writer. First, it should be noted that the 56 classes included in the study range in size from 17 to 36 pupils, with an average 29.7 pupils.

Sixty-two elementary teachers and principals responded to a number of questions, the results of which are tabulated in Table 1.

It is interesting to note from the table, that a disparity between *actual* and *ideal* class size already exists. The most striking note is that the distribution of classes and the mean size thereof are higher than the desirable *maximum* indicated by the teachers themselves!

Problems of Large Classes

Turning to a more fruitful field in the study let us examine what teachers think about this question: What are the most difficult problems encountered in teaching large groups? Almost every teacher (56) listed "individual attention" or words to that effect, indicating that the individual pupil loses specific aid of the teacher as the number of pupils per teacher increases. Next in order of frequency of response was "Rigidity and formality of program," indicating an undesirable tendency toward inflexibility mandated by large classes. An equal number (21) of teachers cited "Grouping too complex" as a problem in larger classes. Ranked fourth as a difficulty was "Physical or spatial limitations." At the extreme this would indicate recognizing a finite limitation to the number of pupils, desks and essential equipment that can be packed into a room of a given area; more significant, however, is the recognition of effect on the program due to overcrowding in a classroom. This is further spelled out by the fifth ranking comment grouped under "limited activities."

Table 2 lists all problems associ-

TABLE 2. Problems of Teaching Large Classes Cited by Elementary Teachers[3]

Problem	*Number of Teachers Citing*
Individual attention to pupils curtailed	56
Program rigidity and formality	21
Grouping made more complex; groups too large	21
Seating and spatial limitations	20
Limitation on activity, learning experiences, projects	19
Increased problems in discipline	12
Greater handicap for shy or slow pupils	11

*Assistant Superintendent of Schools, Ithaca, N. Y.

[1]Tompkins, Ellsworth, *Class Size*, Federal Security Agency, Office of Education, Circular No. 305 (Washington: Government Printing Office, 1949), 29 pp. *Large and Small Classes*, Federal Security Agency, Office of Education, Circular No. 306 (Washington: Government Printing Office, 1949), 30 pp.

[2]Grades 1 through 6, excluding classes for handicapped children.

Initiative and independence of pupils curtailed	10
Routine matters burdensome (child accounting, clothing, material preparation)	9
Limited acquaintanceship and understanding of pupils	7
Individual participation by pupils inadequate	4
Remedial and developmental processes unwieldy	3
Less efficiency in adjustment and growth processes	2
Greater difficulty in teaching techniques, such as timing, varying plans and procedures	2

ated with large groups as cited by Ithaca teachers.

The teachers pointed out rather conclusively that increased size of class means, generally, less educational opportunity for each pupil. The matter of control, or discipline, does not appear foremost in teachers' worries. Indeed, several teachers indicated there is little question as to the number of pupils a teacher can manage. As the number increases the program simply becomes more and more formalized and pupil action more restricted.

Suggestions for Teaching Large Classes

Most significant is the approach to teaching large groups which teachers believe has the interests of the pupil in mind. The 62 teachers who co-operated in this study suggested techniques and principles for teaching large groups, as they would expect to employ such ideas in their own classrooms.

TABLE 3. Frequency of Proposals for Teaching Large Classes in Elementary Schools

Technique	*Frequency*
Arts and crafts materials used in greater quantity	11
Blackboard used more frequently, duplicated paper less	1
Clubs and pupil activities (upper elementary)	1
Combined curricular programs (fusion)	4
Committee planning of program by pupils (activities, research)	6
Curtailment of action and expression of individuals	1
Formal or highly organized program of studies	7
Grouping according to achievement levels (homogeneity)	30
Group participation as a unit or whole	8
Independent work by pupils (e.g., keeping notebooks)	10
Individual activity channelized to interests and leisure activities (requiring less supervision)	7
Leaders and advanced pupils accept responsibilities	7
Let all pupils participate through extended time for activity	2
Parent-teacher co-operation in pupil learning situations	3
Plans must be carefully and thoroughly constructed	9
Pupils assist one another in program	4
Records of educational data more expedient	1
Routine tasks of classroom management handled by pupils	7
Seating arrangement for minimum of confusion	2
Specific time allotted to each element of program	4
Variety through quiet periods, participation periods, "free" period	2
Written work by pupils of a nature that can be accomplished by majority of group	3

One teacher was moved to make this very useful comment: "Do the best you can. Try not to worry about what doesn't get done. The harassed teacher only adds to the problem."

Summary and Suggestions

Unless teacher recruitment and building construction exceed the current rate, elementary classes in the next ten years are going to be larger. In a city whose average elementary class size was 29.7 pupils in 1949–50, teachers said an ideal elementary class would have 24 pupils and that classes should have between 20 and 29 pupils, normally. About 46 per cent of these teachers are teaching classes larger than the size they consider "a desirable maximum"; 74 per cent teach classes larger than "ideal class size." They believe that the most serious problem of large class size is limitation of the amount of individual attention pupils can receive. They believe that rigid and inflexible programs are a concomitant of large size, and that crowding of space is inevitable, which in turn limits the activities pupils can enjoy. In meeting the situation, teachers suggest that grouping of pupils according to achievement level is most important. Other suggestions frequently cited were: provide more arts and crafts materials, encourage independent work by pupils, make lesson plans detailed and thorough, rely upon pupil help in routine management and responsibility.

A Statewide Service —

Training School Maintenance Men and Custodians in Virginia

*Dr. B. H. Van Oot**

The old-time janitors who piled coal into the furnaces without knowledge of economy or the heat values of the fuel; who burned out grates by allowing ashes to accumulate; who created fire hazards by piling refuse in the furnace room so it would be "handy for starting fires" in the furnace; who created breeding grounds for vermin and rodents by storing cafeteria waste at the rear door; who lacked even the simplest principles of health and sanitation; who ruined floors by improper treatment; who allowed toilets and washrooms to become filthy, insanitary, and out of repair; who had little or no respect for the appearance of the school buildings and grounds; who allowed roofs to remain leaky, window panes broken or school apparatus to collect rust and dust — these janitors are rapidly passing out of the picture in Virginia.

Virginia, like most all other states, had its share of these kinds of janitors. It was not altogether the fault of the men and women who were employed as janitors. It was quite the custom to employ as janitors people whom the school board could hire at a minimum cost, and most frequently they lacked the most ordinary knowledge and skill necessary to do satisfactory work. The fault was with the school superintendent or the school principal for not providing instruction for these people. Many of these people have latent abilities that can be developed if instruction and training are provided, and if the school boards give them sufficient salaries to keep them on the job after they have been trained.

Origins of the Training

About six years ago Virginia took steps to remedy this situation. The jobs of janitors were thoroughly analyzed to determine what knowledge and skills needed to be taught to the custodians and engineers and what attitudes and appreciations needed to be acquired by them. Having done this, four itinerant janitor trainers were employed by the State Department of Education and each was assigned to a section of the state. These itinerant trainers were themselves expert janitors selected for the most part from schools where they had put into practice their technical knowledge.

The state of Virginia is divided into 100 counties and 20 cities. The program of training was first put into the counties where the greatest need existed. The jani-

*State Supervisor of Trade and Industrial Education, Richmond, Va.

tor trainer would go into the county and ask the superintendent to call all his janitors in convenient areas to a central point where the janitor trainer could teach them in a group, emphasizing points that would be of interest to all — such as the care of floors, the operation of heating plants and pumps, or some other subject. During the next few days the janitor trainer would visit the janitors on the job to see how well the points stressed in the lecture or demonstration were being carried out. While there he would inspect the buildings with the janitors and point out things that needed to be done and frequently he would give a demonstration on how to do these things. During the year instruction on the job was given to 765 male janitors and 187 female janitors.

Work and Training Appreciated

At first several superintendents did not take kindly to this training, but after they saw the enthusiasm for the instruction displayed by the janitors, after they observed the great savings in fuel costs and the decided improvement in the cleanliness and appearance of their school buildings, and after they saw the differences in the personal relationship between the janitors and the teachers and pupils, they began to realize the value of the instruction. Right now it is impossible to comply with the numerous requests made by local schools for the services of the janitor trainers.

The question will naturally be asked: How do the janitor trainers occupy their time during the summer months? The answer is simple. Each summer zone schools are conducted in which janitors from all sections of the state attend. During the past year six such zone schools were conducted. A total of 698 janitors were enrolled. A number of principals, superintendents, school board members, interested citizens, and city and town officials visited these schools for varying lengths of time.

The janitor training service is under the direct supervision of Linscott Ballentine, Assistant State Supervisor of Trade and Industrial Education, assisted by W. A. Sexton, H. C. Blankenship, and M. A. Alvin, itinerant janitor trainers.

In conducting zone schools the services of representatives of manufacturers and distributors of school supplies, maintenance materials, and equipment are accepted. These men are not allowed to stress their own special products but are confined to discussing over-all topics, such as the treatment of wood and tile floors, operation of heat controls, and similar topics. In no cases have the representatives of manufacturers or distributors violated our confidence by boosting their own products and "knocking" the other fellow's goods or machines.

In addition to inspirational addresses and addresses of welcome, the topics discussed in the zone schools are selected by conferences with the prospective students. The discussions headed by experts in their respective fields include:

Topics of Instruction

1. Relation Between Janitors and the Principal
2. Stokers
3. Oil Burners, Vacuum Heating, and Condensation Pumps
4. Maintenance and Care of Low Pressure Cast Iron Boilers
5. Fire Prevention and Fire Hazards (by the city fire chief)
6. Cleaning and Care of Toilets
7. Maintenance of Floors
8. Equipment for Cleaning School Buildings
9. Good Housekeeping and Proper Tools for Cleaning
10. Firing, Cleaning, and Maintenance of Low Pressure Steel Boilers and Heating Systems
11. Traps, Valves, and Unit Heaters
12. Demonstration in Unstopping of Drains
13. Hardware in School Buildings
14. Maintenance and Care of Electrical Equipment
15. Care and Maintenance of School Grounds, Lawns, and Shrubs
16. Cleaning the Gymnasium
17. Cleaning Classrooms
18. Waxes
19. Dust Control — Liquid Dust Treatment and Various Types of Sweeping Compounds
20. Lubrication of Motors, etc.
21. Scheduling the Work of the Janitor
22. Hand and Mechanical Firing
23. Modern Illumination of Schools
24. Automatic Temperature Controls
25. General Building Repairs

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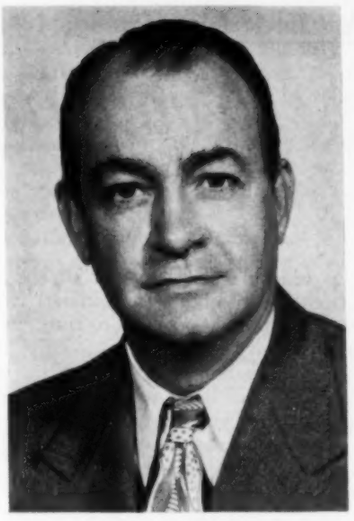
State Superintendent Public Instruction.

State Supervisor Industrial Education.

19

Every janitor who successfully completes the course receives a certificate.



Ralph M. Gantz
Superintendent of Schools
Steubenville, Ohio

Mr. Gantz, who succeeded D. C. Fox on August 1 as superintendent of schools at Steubenville, was formerly head of the schools at Bedford, Ohio. He was an instructor for six years in Barberton, a high school principal at Mifflin for eight years. During the past six years at Bedford, he was responsible for a successful campaign to raise one and three-quarter million dollars for a comprehensive building program which has been launched for new schools and for renovating the existing buildings. In electing Mr. Gantz to the superintendency, the board has extended to him a 5-year contract.

Good Relationships Emphasized

The above list of topics shows that the work of the custodian requires an understanding of a wide range of science and mechanics. The relationships between the custodian and the teachers, principal, and students involve a knowledge of elementary psychology and the practice of tact and diplomacy. When the custodian realizes these needs and attempts to put them into practice, he realizes the importance of his job and is inclined to study further the technical aspects of his position. Further, when the school officials realize that the work of the janitor involves more than just sweeping floors, shoveling coal, and wheeling out ashes, they are inclined to

(Concluded on page 96)

A Check List for —

Avoiding Extracurricular Chaos

C. Howard Smith*

A desirable characteristic of the extracurricular program is minimal conflict with the total academic picture. At best each activity functions smoothly within its own sphere. It articulates its efforts with those of the over-all program. At worst it hurtles through the system like a runaway boxcar, temporarily putting out of commission routine educational practices and creating a first-class example of extracurricular chaos. The inevitable consequence of the boxcar technique is that although few educators deny the educational values of plays, concerts, and operettas, none will bear with agreeable dispositions the confusion produced when a given activity becomes for a month or so the focus on which the entire staff dissipates its intellectual and physical strength.

In such an atmosphere, the possibilities for pedagogic grief are unlimited, for the causes of conflict are myriad. Usually, however, they have a common origin: ineffective operation of administrative procedure. A basic list of inefficiencies, which may appear at any level of professional effort and involve teachers and administrators alike, would include the following most obvious sources of difficulty: (1) activities poorly scheduled with reference to the school calendar, (2) unrestricted ambitions to excel the previous year's work or the work of another department, (3) ignorance of the application of the elementary principles involved in producing a given activity, (4) failure to make clear at the outset the aims of the activity and the extent of co-operation desired from other staff members, (5) failure to provide for adequate supervision, (6) failure to establish and maintain consistent policy, and (7) failure to delegate definite responsibilities.

The remarks in this discussion, which will be limited to a consideration of the nonathletic aspect of the extracurricular program, are the result of more than ten years' effort and observation in the field. The author believes that smooth sailing in out-of-class activities is just as important to the child's welfare as the well-regulated recitation. The following suggestions have been written with that thought in mind. The imperatives which appear in each item in the check list are intended to apply in almost every case to the school family in its entirety. Common sense, however, will make the division between the strictly administrative responsibilities (as in Section I) and those needing executive supervision (as in Section II).

*Clifford J. Scott High School, East Orange, N. J.

I. Directing the Activity

1. Establish *regular* faculty direction of pageants, plays, concerts, operettas, and other exhibitions involving public presentations. Remember that ability to handle children in large groups is essential, for adolescent behavior in the rehearsal hall is different from that commonly observed in the classroom.

2. Divide responsibility, if more than one teacher is to be assigned, to eliminate the famous question: Who is supposed to be doing what? Keep in mind that moderation in division of labor is desirable, too, for reasons obvious to one who has heard the complaint that artistic trespassing is ruining a major production.

3. Recognize the time-consuming nature of directing out-of-class activities. Teachers thus assigned need to be freed from the pressures of detention halls, attendance registers, home rooms, corridor duty, cafeteria supervision, multiple preparations, traffic patrols, community drives, etc.

4. Solve problems of compensation intelligently. The laborers are worthy of their hire. Consider paying a specific sum annually and/or offer a reduced teaching load, i.e., fewer classes, no study halls, no home rooms, fewer preparations.

II. Selecting the Material

1. Make review copies of plays, operettas, and pageants available to the directors. Insist on correlation of the types of material to be used with the physical limitations of the school plant, with the habits, customs, and intellectual and religious mores of the community, and with the abilities of the children.

2. Secure rights of production, which are usually controlled by the author's agents, before the activity is undertaken. Insist that those responsible for selection have in mind the maximum fee which the school can pay.

3. Remember that the responsibility for the final selection of the material should rest on the combined judgment of a committee consisting of persons concerned with different phases of the activity. Frequently pupil interest may justify the inclusion of representatives of the student body.

III. Selecting the Participants

1. Have competition open to all, or to all in the special group of which the activity is representative. Predesignation of even the most likely candidates is usually a capital method of initiating extracurricular chaos.

2. Make arrangements for auditioning candidates in groups, in private, or in semi-private (boys alone, then girls) in the presence of directors and/or the teacher-student committee on selection. Give early notice of restrictions regarding candidate selection such as academic standing, health, parental objections, out-of-school obligations, conflict with other activities, and disciplinary measures.

IV. Rehearsing the Activity

1. Immediately have policy established on answers to these questions, which involve a critical phase of the extracurricular program:

a) When may rehearsals conveniently be held? During the school day? Immediately after school? Evenings? Saturdays? Sundays?

b) How many weeks or months of rehearsals will be needed?

c) How long may a rehearsal period last?

d) Will the same room or auditorium be available every day?

e) Can a harmonious schedule be worked out with other members of the staff for use of facilities?

f) What arrangements must be made with reference to heat, light, locks, washrooms?

g) At what level will excuses for absences from rehearsals lie?

h) Who will be responsible for discipline during rehearsals?

i) Will there be special requirements for dress rehearsals? Assignment of extra teachers? Changes in schedule or length of school day?

j) How may good public relations be maintained effectively with the parents in face of new demands on students' time?

V. Staging the Activity

1. Make an early survey of effects available through purchase, rental, and previous ownership.

2. Determine to what extent a faculty-supervised stage crew may function in the following areas:

a) Constructing, painting, and erecting scenery and other special effects.

b) Handling the mechanics of lighting.

c) Making permissible changes in previously acquired property.

d) Returning rented effects.

e) Stowing permanent effects in accessible places.

3. Check and double check for safety the kinds of duties assigned to children which involve physical effort and the use of tools, ladders, and rigging. One misstep may invite an insoluble problem.

4. In the matter of the program, determine the format, quality and color of paper, credits, number of copies, distribution, and amount and kind of advertising. Set a deadline for copy especially if programs are to be printed in the school shop.

5. In the matter of cosmetics, wigs, beards, costumes, and properties, fix a policy on purchase, rental, application, return of borrowed items, replacement of old items unfit for further use, and stowage of stock in accessible places. If children are to be responsible for their own effects, make decisions about the amount of money and time which parents are to be asked to spend. If the clothing and food departments are to assist with costuming, see that they are properly briefed.

6. Establish a policy for selecting, supervising, and training ushers.

7. Establish a policy for publicity in terms of kinds and quantities of pictures, stories, posters, etc.

8. Remember that dressing rooms must be supervised, lighted, heated, furnished, and provided with sanitary facilities. If makeshifts must be used, make adequate arrangement for division of the sexes.

9. Remember that tickets impose problems of copy, format, printing, distribution, collection, and analysis of sale. Make arrangements for stowage of the retained portion of tickets until local, federal, and state obligations have been satisfied.

10. Work out early and definitely janitorial assignments. Advise custodians of rehearsal dates and the need for light, heat, open doors, and cleaning.

11. Brief persons responsible for entr'acte activity as to the kind and quantity of material desired. Instruct them to coordinate their efforts with those in charge of publicity and program.

12. Establish responsibility for paying bills, receiving money, checking expenses, issuing receipts, and submitting the final statement.

13. Satisfy safety regulations as to the presence of firemen and policemen, seating capacity, fire escapes, projection booths, fire doors, hoses, extinguishers, exit lights, and sand and water buckets. Be alert to local rulings on temporary hazards created on the stage and in the auditorium, such as open lights, extra wiring, special effects, specially constructed platforms and stairs, curtains, draperies, scenery, and dimmers.

14. Establish a policy of credit for student activity. Consider using a letter and a certificate, awarding academic credit, or giving departmental honors at graduation.

More Important Than Ever —

Teacher Supply, Tenure Legislation, and Dismissal Action

*Stephen Romine**

Economy in education requires reasonable tenure for teachers. Constant changes in the teaching staffs of schools constitute a great waste of human and material resources and set up a serious threat to the education of boys and girls and to the professionalization of teaching.

Most school administrators are aware of this problem and are working to improve the situation. Two conditions may serve to make this increasingly possible on the high school level: (1) There is an increasing supply of qualified teachers. (2) In an increasing number of states the law assures teachers of permanent tenure. With the understanding co-operation of teachers, administrators, and boards of education a new era of increased and improved educational services may be ushered in. Without such co-operation neither an adequate supply of trained teachers nor the individual teacher's security under tenure may properly serve the best interests of the children and the schools.

Perspective Is Important

One of the major areas of personnel management spotlighted by these conditions is that of the dismissal of teachers. In years when the supply of teachers was inadequate hesitancy in dismissing even an incompetent person was common. A superintendent deliberated a great deal about the chances of replacement before letting a teacher go. The present increasing supply makes it possible for superintendents to be more selective. On the other hand, the security given by a tenure law may stabilize teaching staffs or it may cause a reaction which will throw the whole employment situation out of balance.

In handling problems growing out of these opposing forces, the attitude of administrators and boards of education is of utmost importance. Because they share responsibility for teacher employment and dismissal, they will be looked to for leadership in solving the teacher problems now confronting the schools and the profession. They may do yeomen service by guiding their action in terms of calm and reasoned judgment and by avoiding fearful and reactionary action. Undoubtedly most of them will attempt to avoid mistakes and to act in good faith for the best interests of all concerned.

Some Principles to Consider

It is inevitable that occasions will arise when it seems necessary to dismiss a teacher. Care should be exercised that such a dismissal is really justified. The fact that another teacher can be found should not be an excuse for dropping a competent instructor. Nor should the existence of tenure be considered a reason for holding an unsatisfactory teacher who feels that he is protected in his incompetency. In this connection a few suggestions may be useful:

1. Teachers should be dismissed only for legitimate cause which can be clearly established.

2. It should be the policy of the board of education to dismiss or retain teachers only upon the recommendation of the superintendent of schools.

3. The superintendent should be guided in his recommendation by the high school principal with whom the teacher has worked.

4. A teacher who is dismissed should be given the reasons for such action and should have a chance for a hearing before the board of education.

5. The administrator and the board of education should exercise fairness and reasonableness in matters of dismissal, taking only such action and in such manner as is clearly just to all concerned.

6. Attention should be given to the school law and to the regulations of the accrediting authority so that the requirements of the state and other agencies are not overlooked.

7. Dismissal action should be taken and the teacher notified early enough to allow a reasonable length of time in which the teacher may make necessary adjustments in his plans and to find another teaching job.

*Associate Professor of Education and Director of High School Counseling and Accreditation, University of Colorado, Boulder, Colo.

Tenure and Dismissals

Tenure laws should not serve to dislodge a competent instructor nor an incompetent teacher. In schools coming under the provisions of a permanent tenure law, the effect of the law should be considered during the probationary period of a teacher, and greater care should be had in making a reappointment at the end of this period. This added care may be a good thing.

Some superintendents and boards of education have been overly cautious in dismissing incompetent and unqualified teachers. Others have not been sufficiently concerned to help teachers do a better job of teaching and thus avoid failures. Quite possibly these conditions were promoted by the difficulty of finding fully qualified personnel and by the fact that dismissals could be made at the end of any year. In other cases, dismissals have been made without justification for personal or political reasons. Such actions of school boards reflect adversely on a school, because unfair dismissal practices are soon known far and wide.

The Superior Teacher Problem

It has been said that superior teachers need no protection for holding their jobs, and that poor ones should not have it. The problem is not that simple. Better teachers sometimes are more uneasy about their positions than poor teachers, and not without good reason in some cases. Excellent teachers tend to be more self-critical, more alert and sensitive to problems, and more anxious to do a good job. Often these persons are active professionally; they take part in many activities, and in so doing they take a stand on issues. They try to be effective as citizens and teachers. They want to improve, which implies change, and they may be a little impatient. They tend to judge conditions and suggestions and are less likely to accept without question either theory or practice, in school or out. In many ways, the superior teacher is more likely to be criticized than is the less able individual who does a passable job and/or who is willing to go along without doing anything that might cause a ripple on school and community waters.

This does not mean that superior teachers are troublemakers. But they do cause pupils to think and to ask questions, and these things sometimes are a source of concern and may not be welcomed in a community. The drive and enthusiasm of very capable and young teachers may make them less tactful and respectful than they should be. The point is that care should be taken so that tenure does not cause the discharge of excellent teachers in favor of less able ones.

The foregoing suggestions apply especially where teachers do not have legal tenure. Where teachers are completely dependent on the boards for the renewal of their contracts, sound reasons, recognition of the human values, and respect for the professional welfare of the teachers are especially necessary. The requirements of the Accrediting Associations also seem to take this point of view.[1]

Helpful Administrative Measures

To minimize the danger of improper dismissal action, administrators need to be concerned consistently and early in each school year with other personnel policies and practices. Among these are the following:

1. Teachers should be very carefully selected in the first place.
2. A personnel file should be established for each teacher and used constructively in recording evidence of the individual's growth and development.
3. There should be an effective orientation program, particularly for new teachers, and duties and responsibilities should be defined clearly.
4. An effective supervisory and in-service training program is essential, including administrative leadership and cooperative evaluation of the educational program.
5. The written policies of the school board should include statements regarding initial appointment, in-service training and growth, salaries and promotions, dismissal action, etc.

Each of these five points might be discussed at length. Collectively, they do direct attention and effort toward better first selection and toward positive measures which will help teachers to become more effective on the job.

Let's Make Tenure Work

Teacher tenure will be what the teachers themselves and the school boards make of it. Rightly understood and justly administered, it may provide enough security and lead to enough stimulation that teachers and schools alike will benefit. Of very great importance is the manner in which administrators and boards of education view it, particularly in this introductory period. Let's give it a hand that it may succeed.

[1] E. G., see "Policies, Regulations, and Criteria for the Approval of Secondary Schools, 1949–50, p. 18, North Central Association of Colleges and Secondary Schools.

A Sign for Every Windshield. — Ray Evans in the Columbus, Ohio, Dispatch.

We Shall Need —

PHYSICAL FITNESS FOR NATIONAL SURVIVAL

*Frederick Rand Rogers**

Once more our nation is faced with a major threat to its continued life as an independent government. But the odds are perhaps three to one against our winning the coming struggle, at least within a sufficient span of years, to save what we hold most precious in life: political and religious freedoms, relative abundances of material goods, even hope for the continuation of humaneness in social life. For, last time we were but strong allies of other great nations which bore the brunt; this time we are the major power, while our potential allies are in numbers of men but a fraction of those our enemies are already training to attack us.

Hence to survive this trial we must exert many times the energy required of us merely to help win World War II.

Once more, therefore, the present writer urges upon the school executives and school boards of this nation early and thorough investigation of a physical fitness program long since proved signally efficient in certain United States public schools, colleges and universities — a program so efficient indeed that it has no rivals at all today — a program developed, 1926–31, for New York state by many researchers and field workers, further improved by others in Massachusetts, 1931–40, later improved again and again by still others. . . .

A program furthermore which proves its outstanding values almost instantly and automatically. A program moreover which may be embraced by almost any school or college without adding appreciably if at all to the financial cost of local education, and without reducing the time of pupils in academic classes; which actually serves moreover to improve academic scholarship.

These may seem extravagant statements to readers uninformed concerning the "PFI Program." In point of easily confirmable fact, however, the importance and values of the physical fitness program referred to above are difficult to overestimate.

"Why then," will be the natural rejoinder, "why then is this program not yet known to all, in use everywhere?"

The answer to this query may be found in an article by the present writer published in the December, 1944, issue of *The School Board Journal.*

"What then *is* this extraordinary program?" will be a natural follow-up question. The answer may be found in the February, 1945, issue of *The Journal.*

"And how should school boards and their chief executives go about introducing this program into their own school systems?" will be a natural third query. The answer: in the April, 1945, issue of the same *Journal.* But we may here condense that article to two statements. For virtually the only two actions required of school boards and administrators to insure that the pupils in their schools will be very greatly increased in all-around efficiency — but particularly in physical fitness — are, first, to instruct their subordinates in charge of health and physical education activities, "Forthrightly embrace physical fitness as a prime aim of your professional lives, and the PFI Program as one basic method of raising your pupils' physical fitness to optimum levels." And then — naturally — school boards and their executives should co-operate with these specialists, uphold their hands, and adapt local programs to their requirements.

To the information contained in these three articles add certain other items:

First, since 1945, many wartime leaders in armed forces' "physical fitness programs" have reverted to the older, partially discredited "free-play" and "sports" programs, ignoring almost every wartime lesson that physical fitness must be developed by direct methods, even virtually rejecting — once more — physical fitness itself as a prime aim of physical and health education programs. All this, of course, in order to exalt athletic skills, "the moral objectives of physical education," and interschool athletics. . . .

Hence most public school physical directors and supervisors of physical and health education "in the field" are once more confused concerning their major functions, and require to be briefed by school executives concerning national needs, their duties in view of such needs.

Nonetheless, since 1945 the program referred to above has become better known, more discussed, abstractly appreciated, endorsed "in theory" by a steadily increasing number of physical educators throughout the nation.

Second, the PFI Program has been steadily improved since 1940, even more since 1945: by refinements in testing instruments and techniques, by new methods of interpreting PFI scores (relating them to I.Q.'s and somatotypes), by further refinements in methods of individual pupil follow-up and report, etc.

Third, since 1945, numerous professional articles, monographs, textbooks on PFI and other strength tests have reported new proofs of the great value of strength to total personality, and the high validity of PFI tests in measuring student needs and progress in physical fitness.

Fourth, more recently two other developments of PFI Programs promise considerably to advance their fortunes, hence increase the physical fitness of this nation. One of these is the improvement of new strength testing apparatus by certain gymnasium equipment companies, e.g., Fred Medart Products, Inc., St. Louis 18, Mo., which has norm charts, a brochure on PFI tests, etc., otherwise inconvenient to obtain.

The other is the conduct of experiments for the possible use of PFI tests in industry — by one of this nation's greatest manufacturing corporations.

Fifth, since 1948, a National Committee on Physical Fitness has been in existence "in co-operation with the American Medical Association." This committee has already expressed itself as desirous — eventually — of assessing each citizen's physical powers by objective tests, and of helping each individual to attain his own optimum level of strength. Both of these are, of course, prime functions of PFI Programs, and have been so since 1925.

Sixth, school executives and school board members who desire further aid (*a*) in formally adopting physical fitness as a prime aim of physical and health education, and (*b*) in establishing the most effective programs for pursuing this aim locally, should inquire particularly of physical education authorities at Syracuse University, Springfield College (Mass.), Boston University, or public school officials in various cities named in the articles referred to above.

*Monterey, Calif.

Report of an Experiment —

Teaching Effectiveness of Motion Pictures and Film Strips

*Harold F. Hughes**

Audio-visual education has been accepted generally as an integral part of the school program. The ex-servicemen who have become teachers have experienced it in all of its phases. But to many teachers in the elementary and high school fields, who got no closer to the Services than the newspaper accounts of the training, visual education means but one thing — showing motion pictures. As so often happens the glamour girl on the program "stole the show."

As director of a school program for many years the author has had the usual experiences — successes and failures — of those trying to guide teachers in the proper balanced use of all types of aids. A usual comment has been: "I believe in visual education. Why can't we have more movies to help in our teaching?" Then follows the second request — for enough motion pictures to "fill the period."

When a teacher has five or six classes studying the same subject, might it not be considered that the audio-visual department is expected, unconsciously perhaps, to act as a substitute teacher? Of course it is not out of place to send an outside lecturer into the classroom, especially if such procedure produces interest in, and provides a background for, the subject under study. The teacher should frankly say, "We are furnishing a conditioning background for further study" — not "We are teaching with motion pictures."

The climate of visual education took on a healthier aspect with the return of the veterans. As one young man expressed it, "I saw many movies in stuffy rooms, at least, as long as I could keep awake. We began to learn when we got film strips and models to work on. Then, instead of drowsing, we all got into the act."

An Experiment With Slides

In the spring of 1949, while teaching three classes in audio-visual methods for the Fresno State College, the opportunity came to make a test of the actual teaching values of motion pictures and film strips. Two classes were made up of college students, the third consisted of teachers in service. To avoid a mind set, no mention was made of what was being done other than to suggest that a demonstration of what was to be given of materials used in teaching geography.

In the *Encyclopedia Britannica* productions on Regional Geography the material was ready for the experiment — (1) a single-reel sound-motion picture on a geographical area and (2) a film strip containing the essential stills from the movie with explanatory titles. The classes were each shown the motion picture and the accompanying film strip. Attention was called to the fact that the same general information was found in each. A discussion followed as to what learnings could be expected from the presentation. The class exercise was to use the notes taken and to form a series of twenty questions on the area presented. Then the subject was dropped for several weeks.

The instructor prepared two sets of similar questions on two areas — the Middle and the Northwestern States. These were mimeographed in quantity ready for the actual experiment.

As the class periods were two hours, we prepared to use practically the same amount of time on each medium, with a recess between. The established presentation procedure was used:

1. Prepare the class by explaining the material.
2. Tell the students what to look for.
3. Show the projected material.
4. Ask questions and promote discussion.
5. Test.

The Materials Used

In one class the film on the Middle States and the film strip on the Northwestern States were used. In the second class the film strip on the Middle States was substituted and the film on the Northwestern States projected. The only difference in the presentation of the material was due to the nature of the projection. The discussion of the film strip went on as the strip was advanced; obviously the discussion of the motion picture had to wait until the film ended. The teacher group also took a comparison test. Because of the experience of the group many of the answers might have come from general knowledge instead of from the screening.

Here is a sample of the test given after each discussion:

NORTHWESTERN STATES

1. There are nine states in this group. Cross out the two which do not belong. Utah Arizona Montana Wyoming Kansas Nevada Colorado Nebraska North Dakota South Dakota Idaho
2. Underline the phrase that makes the following statement correct: These states were settled before the Gold Rush afterward
3. Name two European countries that contributed settlers. .....
4. Settlers were attracted by the beautiful scenery abundant vegetation free land. (Underline the correct phrase.)

*Fresno, Calif.

5. The average rainfall in most of the region is 9 in. 16 in. 30 in. Over 30 in. (Circle one.)
6. The highest land is on the .....ern side.
7. What great drainage basin includes most of the group? .....
8. Circle the percentage nearest that of the rural population. 33% 40% 50% 66% 75%
9. There are five cities having more than 100,000 population. Cross out the two that do not belong. Salt Lake City Denver Topeka Kansas City Omaha Wichita Chicago
10. These states attract many tourists. Underline the most important reason. good roads fine climate national parks big irrigation projects
11. Lumber is an important project. In what section are the largest forests? .....
12. What name applies to the farmers of these states? tobacco farmers dry farmers sharecroppers
13. Name the most important cash crop. .....
14. Petroleum is found in three of the states. Cross out the ones that do not produce it. Kansas Montana Idaho Wyoming Colorado Utah
15. These states produce many sheep and lambs. Circle the fraction nearest that of the national production. ¼ ⅓ ½ ⅗
16. These states produce part of the nation's beef cattle. Circle the proper fraction. ¼ ⅓ ½ ¾
17. A particular crop is raised on the irrigated lands. Name it. .....
18. Circle the two most common methods of transporting the productions of this area. barges railroads trucks airplanes
19. What two cities process wheat into flour? ....
20. Coal is found in many of the states. Underline the three largest producers. Idaho South Dakota Utah Colorado Pennsylvania Wyoming

The Results and Conclusions

The papers were graded on the percentage basis. Here are the results:

In the one class with 39 students, one did equally well on both tests; three scored higher from the motion picture; 35 were better from the film strip.

Class average: motion picture, 79.5 per cent; film strip, 91.9 per cent.

There were 34 in the second college class. One scored the same on both; one scored higher on the motion picture; 32 did better from the film strip.

Class average: motion picture, 78.4 per cent; film strip, 93.5 per cent.

The teacher group produced closer scores. Out of 42, two did the same on both; 11 scored higher on the motion picture test; 29 made better marks on the film strip.

Class average: motion picture, 86.7 per cent; film strip, 92.00 per cent.

These results do not prove any lack of educational value in the motion picture in the classroom. Motion pictures are very valuable to (1) show motion, (2) promote interest in further study, (3) permit students to travel over the world vicariously, (4) provide emotional background for the appreciation of nature and historical reconstructions. For example — "Give Me Liberty" is a fine historical short. But if the aim is to impart information and understandings, the student should not be considered an empty bottle passing under an educational spout. To learn, a student must manipulate the tools of learning; he must be an active participant. By using still projection he can prepare himself for a report, give it to the class, and take part in answering questions and discussing the material. Even if schools have unlimited funds for the purchase of motion pictures, and some teachers still desire to have motion pictures to "fill the period," it should be the job of supervision to give in-service training in the use of the inexpensive film strips and lantern slides.

CO-OPERATIVE BUYING FOR RURAL SCHOOLS

*L. E. Parmenter**

So you have about decided to go into co-operative buying of school supplies and equipment! Surely any plan aimed at expanding the services of the school dollar is laudatory. Add to that the fact that supplies and equipment constitute the neglected stepchild of education and you have a picture worth framing in order that everyone may examine it carefully and in full light.

Since you have the proposal of co-operative buying under advisement rather than under seal it is not too late to consider some problems. Of course, the idea of co-operative buying has been in the minds of people with as good intentions as those of the back-seat driver. No one wishes to tamper with the truth, but the problem is one of determining the truth about car load lot purchasing. Perhaps a specific reference will serve to establish significant facts.

The several schools constituting the public education system of a thriving county in one of the more progressive of the midwestern states recently sought to explore the possibilities of buying school supplies under one name for shipment in one car. Specifically prices were sought on paper towels, toilet tissue, mimeograph paper, and similar necessities for the operation of the elementary schools of the county. "We hope to buy enough for one car load. Please quote your best price and specify whether it would be delivered to the schools or shipped in one car to Central City."

The Car Lot Problem

Just how does the proposal stack up with the possibility of getting delivery and a cash savings? Here are a few high lights of a letter from the supply company directed to the committee who made the initial inquiry.

"First, the quantities mentioned in the order constitute only a small fraction of a car load.

"Second, there are many complex problems involved in the proposed order to confuse the possibility of filling the request.

"For example, towels and mimeograph paper represent two freight classifications and the freight classification must be the one carrying the highest charge.

"The paper orders are filled in an adjoining state and are, therefore, free of the state sales tax. It would be necessary to clear with your own state taxing authorities as to whether the projected car load purchase would fall in the exempt category.

"Third, some reliable person in your county would have to assume responsibility for the car after it arrived at its destination. The responsibility among other things, involves much time as well as considerable personal financial responsibility. Upon arrival of the car this person would have to:

"*a*) Inspect car and contents. Check against shortages and damaged merchandise. All merchandise would have to be checked out to the schools, who are the ultimate purchasers, to avoid error in distribution of contents of the car.

"*b*) Each freight car would have to be unloaded without delay in order to avoid expensive demurrage charges, which are levied after the first 24 hours.

"*c*) If the contents of car are forwarded direct to the several schools ordering them, then bills of lading must be locally prepared and all paper work handled for the freight forwarding from the car. This includes checking out the contents of the car to the trucker and checking in all contents of each shipment at the school.

"*d*) The intermediate consignee (the individual responsible for the breaking of the seal and checking the contents) should guarantee the shipper financially against loss in improper handling of the car after arrival. The risk involved which should be covered includes demurrages, trouble with transportation companies, errors in handling, shortages, and so forth.

One Person Must Be Responsible

"The schools, who are parties to the order, should put the consignee of the car in a financial situation in which he could guarantee payment on the whole so that the shipper would be protected in releasing this merchandise to an intermediate party other than the school users.

"Unless there could be a personal guarantee from the individual responsible for the opening of the car and attending to details, it would comprise a case of everybody's business with a lot of tangled shipments, confused accounts, slow payments, and ofttimes bitter arguments. It takes knowledge, skill, and judgment to handle merchandise and keep accurate records of transactions. — Very truly yours,"

And so you have pondered the question, "Do we want to take over purchasing in quantities with attended responsibilities and attended troubles, or do we want to rely upon a responsible merchandiser such as the local school supply distributors?" Economy is a big word and involves many definitions as one might know from pondering this whole problem of quantity buying for a group of schools with good intent but without commercial experience.

Price and final cost are two far different things.

*Executive Secretary, National School Service Institute.

A Reply—

SCHOOLROOM LIGHTING LEVELS

*Willard Allphin**

In the May and July issues of the JOURNAL, Dr. John C. Almack writes on "Better Lighting for Better Seeing," his theme being that North daylighting is undesirable and that present standards of artificial illumination are too high.

The present writer is not concerned with the daylight question except as it bears on illumination levels, but he does feel that certain errors and inconsistencies of the paper should be pointed out.

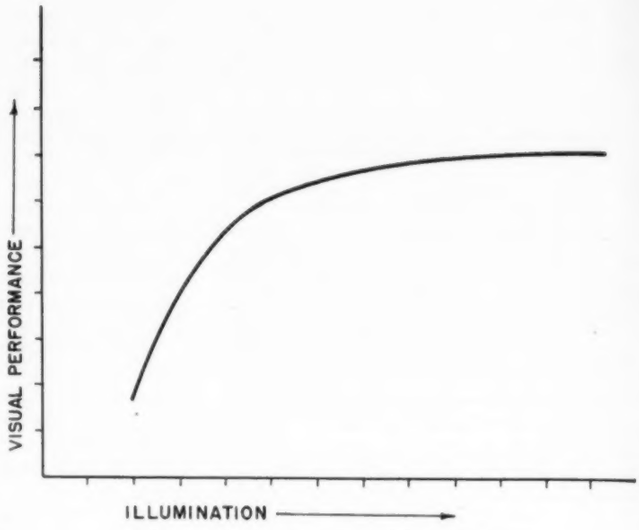
Although the paper nowhere says so, the present minimum level recommended by the Illuminating Engineering Society and specified by the American Standard Practice for School Lighting is 30 foot-candles. It is also true that the National Council on Schoolhouse Construction has criticized the recommendations of the American Standard Practice but, as shown in a JOURNAL article,[1] the disagreement was more apparent than real.

Dr. Almack says, "These new requirements are not the product of any specific investigation. They appear to be copies of war plant experience, and agree well with promotional policies of manufacturers of lighting equipment and distributors of electrical energy." It is certainly true that war plants and peace plants have come to the use of levels from 50 to 100 foot-candles or more, but there is a long experience of improvement in productivity, safety, and morale to support these improved lighting conditions.

High Daylight — Low Artificial Light?

From time to time, various writers have argued that artificial lighting levels higher than 15 to 20 foot-candles are unnecessary. Dr. Almack offers the unique opinion, unsupported by evidence, that high levels are harmful. At the same time, he wishes to admit direct sunlight to the room, providing illumination in the hundreds of foot-candles. (A recent article[2] in an architectural magazine shows a schoolroom with a skylight section which provides illumination of from 225 to 300 foot-candles even though direct sunlight is excluded by louvers.) Although Dr. Almack never defines "high" and "low," he evidently gives them different meanings for artificial light than for daylight.

Considering the similarity between the radiation from the sun and from a fluorescent lamp, it is difficult to see why 30 or 50 foot-candles from the lamp should be harmful while five or more times as much illumination from sunlight would be beneficial. This is not to say that daylighting is undesirable in a classroom. While it would be difficult to admit direct sunlight without producing glare, controlled daylight should be used freely, and supplemented with high quality artificial lighting.



The Visual Acuity Curve and Illumination.

Strictly speaking, illumination is not measured in "foot-lamberts" as Dr. Almack does in three places. Illumination, the amount of light *falling on* a surface, is measured in "foot-candles." Brightness, the amount of light *leaving* a diffusing surface, is measured in "foot-lamberts." Each depends upon the number of lumens per square foot involved. Thus, 30-foot-candles of illumination on a desk top would mean 21 foot-lamberts brightness for white paper of 70 per cent reflectance and 9 foot-lamberts for a desk surface of 30 per cent reflectance.

When Dr. Almack says "Ten to 20-foot-lamberts may be furnished for such subjects as sewing, mechanical drawing, laboratory science, basketball, shorthand, typing and bookkeeping," sewing is a poor sample in support of his arguments because, for instance, it would take 200 foot-candles of illumination to give a brightness of 10 foot-lamberts to dark cloth of 5 per cent reflectance.

Scientific Basis of IES Standards

To be more constructive about the matter, let us see what scientific basis there is for any particular foot-candle specification. The accompanying curve shows a function which occurs again and again in research on vision, whenever the task has a bright surround. The IES Lighting Handbook and a recent paper[3] in *Illuminating Engineering* contain good bibliographies on the many researches involved. Acuity, contrast, discrimination, depth perception, speed of vision, productivity in performing a visual task, all increase with illumination and continue to rise up to outdoor daylight values in the thousands of foot-candles.

It is probably true that an adult does not depend very much upon acuity in reading a well printed book, but this is not necessarily the case with a child learning to read. Also, contrast conditions are not always of the best, with penciled writing and duplicated material.

The acuity curve has a "knee" which occurs in the neighborhood of 15 to 20 foot-candles and much attention has been directed toward this by critics of higher illumination levels. However, the curve continues to rise beyond this point and as more efficient light sources are developed, it becomes economic to go further in order to obtain additional improvement in seeing.

Furthermore, the curve in its various applications represents averages of a number of subjects. It is to be presumed that we should light schoolrooms for those who are below the average in their visual abilities, since there is no evidence at all that higher levels obtainable in an interior can harm anyone.

The Physiological Cost of Seeing

One important factor about which little is known is the "physiological cost of seeing," that is, what we "use up" inside ourselves when we see. Studies are being made of the electrical voltages produced by the extrinsic ocular muscles as a possible index; and a paper[4] given at the IES National Technical Conference in Pasadena in August, 1950, covers some new work in this direction. It appears that muscle action potentials may constitute a criterion and, if so, the cost of seeing seems to increase when keen discrimination is required. It also increases more under low illumination than under high. Apparently, reading does not involve this type of discrimination for an adult, but it may very well for a child learning to read.

These studies are preliminary and are only concerned with the cost of seeing. Even if later work should show that higher foot-candle levels are not needed from a cost of

(Concluded on page 89)

*Sylvania Electric Products Inc., Ipswich, Mass.

[1]Allphin, Willard, "School Lighting Standards: A Comment," AMERICAN SCHOOL BOARD JOURNAL, Mar., 1948.

[2]"Better School Lighting with Ceiling Louvers," *Architectural Record*, July, 1950, p. 100.

[3]Crouch, C. L., "Why 30 Footcandles Minimum for Schoolrooms?" *Illuminating Engineering*, June, 1950, p. 343.

[4]Allphin, Willard, "Muscle Action Potentials as Related to Visual Tasks in Industry."

And the Kids Loved It—

Summertime Was a Busy Time in Indianapolis Schools

W. S. Barnhart*

Map study on the Korean situation engaged the attention of pupils in a summer school class in William Penn School, Indianapolis. (Indianapolis News Photo)

The Good Old Summertime was once a happy, carefree time for the typical American child. In modern city life, the summer days bring problems to the parent and the child, and they pose problems of a different sort to school administrators who view with some alarm their idle school buildings. There has been a tendency for city school systems to lengthen the regular school term and to thereby shorten the period of the summer vacation. Neither the patrons nor the teachers have reacted favorably to the suggestion that the public schools operate continuously throughout the year. There seem to be many good reasons for continuing the summer vacation, but there are equally good reasons for providing educational opportunity for those who wish to continue in school activities of one kind or another during the summer months.

The Indianapolis public schools closed their 82 elementary school buildings and seven high schools on June 9, 1950, but on June 12, some 78 of the elementary buildings and six of the high school buildings were opened for summer school activities. This means that a summer school program of one kind or another was under way during the past summer in practically all of the school buildings in the city. The total program touched more than 16,000 individual pupils and required the services of 342 classroom teachers.

*Director of Extended School Services, Indianapolis Public Schools, Indianapolis, Ind.

These boys complete an ornamental corner shelf in an Arts and Crafts class in Benjamin Harrison School, Indianapolis, summer of 1950. (Indianapolis News Photo)

Growth Based on Experimentation

Naturally, such an expanding program of summer school work was not accomplished all at once. It came through careful experimentation and with due regard to the education of the patrons and the factors of flexibility in the planning of the curriculum. It is obvious that the children required by law to attend school during the regular school term attended the summer schools on a voluntary basis. There was a strong emphasis, therefore, on activities which appealed to special interests. These special-interest activities were offered in "centers," meeting one or two days a week, in two-hour sessions.

Music centers, for example, expanded into 63 buildings and required the summertime services of 35 teachers. The program of vocal and instrumental music, ensembles, orchestras, and bands, and the special creative music groups enrolled more than 6000 individual pupils. The pupils in creative music groups were chosen because of special aptitude in music. Their activities included the production of original compositions. Art centers organized in the same manner made use of 38 buildings, with 25 teachers directing the work of 1516 pupils. The summer art work was given a bias toward craftwork similar to the handicraft work carried on in summer camps.

Interesting Work for Girls

Girls in the elementary schools engaged in foods and clothing activities under the standards of the National 4-H Club organization. These centers operated one day each week, during the summer months, with food preparation in the morning, followed by the school lunch, and clothing work in the afternoon. During the past summer this activity was carried on in 55 buildings, with 23 teachers, and a pupil enrollment of 2298. Garden clubs were organized in 17 centers, with 340 enrolled, and shop classes for boys met in 12 buildings, with 180 pupils enrolled. A beginning was made in bringing the garden clubs

Teacher and pupil face the problem of pest control. Herman Teepee, seventh grade pupil in the Otis E. Brown School, Indianapolis, meets Oliver Kling, his Gardening Club sponsor, in his home garden. (Indianapolis News Photo)

under the standards of the 4-H organization.

The regular elementary summer schools, meeting during the morning hours each day, Monday through Friday, for a period of six weeks, were organized during the summer in 26 buildings. These summer school plans, worked out in close co-operation with the Parent-Teacher Associations and the schools, were approved only if it was evident that the community spirit was sufficient to justify the enterprise. The age-grade range in these schools was from the primary through grade 8-A, although the range was not the same in all schools. The curriculum was similar to that of the regular school year, which permitted remedial teaching, attention to special interests, and creative work. These 26 schools enrolled 3284 pupils and were supervised by 123 teachers. Although achievement reports were made at the conclusion of the term to the home schools of the pupils and to the parents, no promotion or acceleration was attempted as a result of the summer school attendance.

Credits Gained in High Schools

The high schools, on the other hand, were credit-earning schools. Meeting for eight weeks, in regular half-day sessions, the high schools conformed to standards established for summer school credit by the Indiana State Department of Public Instruction. A pupil could earn one unit of credit through attendance in a summer high school. The high schools were conducted during the summer of 1950 in seven buildings, with a pupil enrollment of 2933, requiring the supervision of 122 classroom teachers.

The adult-education program and the evening school program, for the most part, were discontinued through the summer months. Vocational classes for veterans were conducted during the summer, offering instruction in shoe repair, electricity, radio, tailoring, and automotive mechanics. The School of Practical Nursing was a continuous school, with new classes entering at the beginning of each eight weeks' period. The practical nursing course requires a full year for completion, with one third of the student's time spent in the school and two thirds in nursing practice in hospitals under supervision.

An intensive course in stenography was organized during the summer for postgraduate students. Through a device of double assignments, it was possible for a group to complete a normal year's course in shorthand in a term of eight weeks.

And the Bands Played

The high school bands rehearsed during the summer and gave a number of public programs in the city parks. The all-city high school orchestra recruited from students and graduates of the high schools, rehearsed during the summer and gave a public concert in late July.

A visit to the summer school scene in 1950 would reveal field trips, nature study hikes, book clubs, dramatics, visual aids, and just plain school. There were 16,000 children in the city for whom the summer of 1950 proved a busy summertime, and the children were quite the better because of it.

"WHAT ABOUT EXTRA COMPENSATION FOR ADDITIONAL SCHOOL SERVICES?"

During the convention of the American Association of School Administrators, a discussion group of some 400–500 educators devoted the afternoon of March 1 to the question "What about extra compensation for additional services?" Superintendent Jordan L. Larson of Mount Vernon, N. Y., who acted as secretary of the meeting reports that general agreement was given to five points discussed:

1. The regular school program, in so far as possible should include all educational activities conducted under the jurisdiction of boards of education; thereby reducing to a minimum or eliminating altogether the title of "special teacher" as well as "special services" and "extracurricular activities."

2. The salaries paid teachers should be high enough to provide a comfortable living, without the necessity of their seeking extra services, either within or out of school for extra pay.

3. Every effort should be made to equalize the teaching load and the benefits available to all teachers. Extra pay should not be granted for certain school activities.

4. In the event of unavoidable inequalities as implied in Item 3 above, and extra pay is granted, such extra pay should apply to all teachers, and then only after the assignment of a reasonably full teaching load.

5. The uniqueness of administrative problems confronting each school, district or community should be recognized. Such problems may require the interpretation or adaptation of the general policies stated above to meet the special exigencies of the local situation.

HAVERHILL ADOPTS REVISED SALARY SCHEDULE

The board of education of Haverhill, Mass., has adopted a revised salary schedule for the year 1950–51, calling for a new minimum of $2,100, new increments of $100 annually on the step plan, and maximum salaries up to $4,200, based on training and the possession of degrees. All increments begin with January of each fiscal year. No teacher may advance toward new maximums at a rate greater than $200 a year, and no principal or supervisor may advance at a rate greater than $300 per year. All teachers will advance according to the salary provided in each classification for the training enjoyed by the teachers.

Word From Washington

The Schools in the National Emergency

Elaine Exton

What will be the effect of the Korean crisis and the uncertainties in the world situation on the nation's schools? No one yet knows for sure. But taking stock of the resources education has to offer in support of national preparedness efforts, representatives of key educational organizations at a conference recently convened in the nation's capital by the National Council of Chief State School Officers pointed out:

A million teachers are available for assistance in draft registration, rationing, and other essential civilian defense activities.

The facilities of the nation's public vocational schools which during the last war trained 14 million men and women for war industries can again be utilized for this purpose.

The nation's 30 million school children can take part in national conservation drives and in the collection of scrap for defense industries as they did during 1942–45.

College campuses can be used to train the military and civilian personnel needed by the armed forces and for carrying on advanced research.

Co-ordinating Committee of Educators

After reviewing the role of education in World War II in order to better understand the place of education in the developing mobilization, the conference members agreed that in order to maintain orderly relations between the Federal government and America's schools and colleges and put into practice the lessons learned in the last national emergency a unified council of educators must be created that could speak authoritatively for American education.

A small interim committee was set up in Washington to keep in close touch with the Federal agencies concerned, both to advise them on how the strength of education can be utilized for the national interest and how the interests of education should be protected. Its membership consists of representatives of the National Education Association, the American Council on Education, the American Vocational Association, the National Council of Chief State School Officers, and the National Commission on Teacher Education and Professional Standards.

In addition the National Education Association was authorized to call together in the near future a policy-making group large and varied enough to represent all phases of education, both public and private, to consider the interim committee's first report and make further plans for gearing the activities of the schools and colleges of the nation to the defense effort.

Policies at the Federal Level

It is hoped that the timely creation of this central machinery will forestall the situation that developed during World War II when state and local school systems had to deal with 14 or more Government agencies in connection with war-related problems.

As this article goes to press the National Security Resources Board — established in 1947 to plan and advise the President on all forms of civilian mobilization — will not be the administering agency to handle actual war production or defense work. According to the present policy existing, Government departments and agencies will be utilized for carrying out emergency programs. However, this does not preclude other organizational or administrative changes being made to effect all-out mobilization of America's potential resources at a later date or the possibility of new wartime agencies being established in the future if circumstances require it.

The President has already delegated to the Departments of Defense, Commerce, and Labor responsibility for preparing a list of critical occupations as a basis for deferment from the armed forces and to the Department of Commerce functions relating to the mobilization of industry.

U. S. Commissioner of Education Earl J. McGrath has made known that the National Security Resources Board has indicated to the Federal Security Agency and the Office of Education that it looks to the latter to serve as the focal point for all planning in the educational area. He reports that the U. S. Office of Education is taking steps to aid school and college officials to contribute to national needs.

Problems of Mobilization Affecting Education

Some of the other serious problems that affected schools in the last national emergency and may confront them in coming months are reflected in these comments of well-known educators:

Declaring that in World War II regulations, allocations, and priorities were made without recognizing that schools existed with the result they suddenly found everything frozen — no scissors, no writing paper, no maps and globes, no steel for school desks or busses, nor even tires — Dr. Howard A. Dawson, executive secretary of the County and Rural Area Superintendents, urges that this time educators propose that allocations of materials be made directly at the source of production so the supplies will be available to schools and earmarked for them "to avoid the cumbersome routine in the last war that was not too effective."

He suggests that inventories of educational needs for equipment and materials should be made right now by school personnel through the schools themselves rather than by "Government people with an unpracticed eye."

Ralph W. McDonald, executive secretary of NEA's National Commission on Teacher Education and Professional Standards, reminds that the schools came out of the last war with immense shortages of teachers, classrooms, and instructional materials and that "we've only begun to solve those questions."

He recalls the widespread induction of teachers into the various armed services in World War II; the tremendous loss of instructors to war industries, Government, and other types of higher paying occupations and the consequent lowering of educational standards that took place practically everywhere "as emergency permits were issued in carload lots by tens of thousands on the assumption teaching was something anybody could do after all other jobs had been filled." "The average teacher at the end of the war was less well-trained by a full year of college," he asserts.

Stressing the importance of training and conserving man power in terms of total national needs, both immediate and long range, Dr. Francis J. Brown, staff associate of the American Council on Education, states that two things happened last time that must not happen again: (1) the onus placed on students who continued their education, thereby increasing their effective contribution to the total national interest in most cases; (2) the War Manpower Commission's surrender to the armed forces of its authority to allocate man power so that the deferment of students was completely abolished, except in medicine and closely allied fields. "Somehow," he emphasizes, "a way must be found to make training for essential tasks as patriotic as service in the armed forces."

Some Guiding Principles in the Emergency

The leaders convened by the National Council of Chief State School Officers to consider mobilization of education to meet the national emergency recommended these guiding principles to assure more efficient use of America's educational resources for the current, or future, crises:

1. That the main business of schools and colleges during the international tension is to continue their full program of education and instruction.

2. That the needs of education for teaching personnel, materials for construction, and supplies and equipment for classroom use must have No. 2 priority after the needs of the military are met "so," as Edward M. Tuttle, Executive Secretary of the National School Boards Association, puts it, "the schools can carry through their program of providing education for our future citizens."

3. That the U. S. Office of Education should be utilized to the fullest extent.

Factors in Shaping School Policy

In shaping policies as to what schools can do to render maximum service to the efforts of the nation and the United Nations in coping with threats to world peace such as

has developed in Korea and may develop in other parts of the globe, school administrators and board members will note many differences between the present defense emergency and conditions prevailing immediately prior to World War II.

The consensus of usually well-informed sources is that this time our country is in for a long, hard pull. Few of those interviewed used less than 10 years to delimit a probable period of international tension; some thought the emergency might extend 15 to 20 years or more.

All characterize the present conflict as an ideological struggle which may make it necessary to plan differently than ever before. "Russia is not simply interested in winning ground with armies," Dr. Ralph W. McDonald warns, "but in winning and enslaving people with ideas."

Said Pearl Wanamaker, president of the National Council of Chief State School Officers and state superintendent of public instruction in Washington: "Educators can play a role second only in importance to our fighting soldiers because this is a war of ideas. Teachers in all of the nation's classrooms are daily engaged in implanting ideas basic to democracy and in dispelling false ideas of totalitarianism."

Dr. William G. Carr, secretary of the Educational Policies Commission of the National Education Association, urges that to combat Russian propaganda which seeks to show Russia as "the great peace-loving nation" and the United States as "the aggressor," American schools should teach the case of the United Nations regarding Korea and make plans for the development of information materials and discussion programs to help clarify both the immediate and long-range implications of the Korean situation and the responsibility of the United Nations for taking action in this and other possible areas where armed invasion takes place.

According to R. W. Gregory, Assistant Commissioner for Vocational Education of the U. S. Office of Education: "With low relief rolls and full employment and no surplus rural youth on farms, any heavy demand on the labor force would call for training of a larger number of women and girls than in the past war."

Howard W. Sinclair, chief of the Aviation Education Division of the Civil Aeronautics Administration, underscores that everyone in the country from kindergarten on through college should grow up with an understanding of the importance of aviation in our daily lives and of the political, economic, and social effects of air transportation and the exchange of cultures brought about through air travel.

On the bright side education is better organized now to deal with its problems than in 1940. The recent national organization of the school boards, the leadership taken by the 48 chief state school officers, the recent improvements in teacher education, and the Government's policy of orderly aid to school districts in defense-impacted areas may be cited among the factors present today which were absent before World War II.

State Superintendents Alert

Among the areas where schools have already felt the impact of defense activities is the state of Washington where Superintendent Wanamaker reports the navy yard and aircraft plants have requested that the public schools provide training for personnel needed in their industries.

In as much as during the last conflict planes and all kinds of vehicles and munitions were produced in Michigan, Lee M. Thurston, the state's superintendent of public instruction, anticipates that some of Michigan's industrial potential will again be used in this way through the awarding of contracts as a result of the $10 billions appropriation for the armed forces approved by Congress in July.

Soon after the start of the new school year he plans to hold a conference at which representatives of all the state school interests will be brought together to canvass war-training needs and civilian-mobilization problems that will devolve on the schools.

Connecticut's school system was the first to call such a conference. After meeting with members of his central staff including presidents of teachers' colleges and directors of vocational education to consider whether an emergency condition existed that would vitally affect education, Finis E. Engleman, Connecticut's Commissioner of Education, moved to invite leading organizations of the state with educational affiliations to send representatives to a one-day meeting, including the Council on Higher Education, the National School Board Association, the P.T.A., the School Administrators group, the High School Principals Association.

The meeting, held on July 19, discussed the complex international situation as it affects education and identified basic problems. High on the agenda was: (1) the question of adequate man power to operate Connecticut's public schools in the face of a growing population that in eight years will necessitate having three schools where there now are two and three teachers where there now are two as well as more equipment; and (2) how to prepare instructional materials and present plans by which children and adults can get adequate understanding of the character and conflicting ideologies of the contemporary world.

Dr. Edgar Fuller, executive secretary of the National Council of Chief State School Officers, has called Connecticut's conclave to the attention of all state superintendents of public instruction with the suggestion that they convene similar state-wide conferences of educational leaders.

Wayne O. Reed, state superintendent of public instruction in Nebraska who will soon assume the post of president of Peru State Teachers College, offers this parting advice: "School officials must face up to seeing the long time implications of this period of international tension because the product coming out of our schools may be the strength that will be necessary to carry on a government of free peoples."

Raising the Colors the First Time at the Jonathan M. Wainwright School, Sierra Vista Acres, Northeast El Paso, Texas. (El Paso Herald-Post Photo)

EDUCATION IN A DEMOCRACY

Democracy emphasizes the worth and dignity of the individual. It recognizes the rights of every individual to life, liberty, and to the pursuit of happiness within the limits circumscribed by the rights of others. While democracy places its emphasis on securing optimum benefits for the individual it recognizes that these benefits must be secured in relation to the rights of all other individuals. Thus, democracy in its effort to secure optimum benefits for each individual, concerns itself primarily with those problems which are common to all in happy group living.—*Charles C. Mason.*

A Scientific Basis —

For Equalized Teachers Salaries: the Muskegon Plan

*Morris Teles, Ph.D.**

This study is an attempt to arrive at a general method for determining teachers' salary schedules. It is the result of an intensive study of local and nationwide practices and trends in setting up of remunerative standards for instruction.

The author proposes to show that the usual methods adopted in determining teachers' salaries invariably lead to unintentional iniquities and injustices. He will demonstrate the arbitrariness of usual standards, and propose a plan that is universally applicable in its flexibility, yet constant and consistent within a given system over an indefinite period of years.

There is nothing in the plan that is in violent disharmony with established practices, and there is no argument against the single salary schedule or higher pay for superior training and experience. Specifically, although the author concurs with other educators that teachers' salaries should be higher and that more money should be spent on education in general, there is nothing in the plan that requires additional funds. Although it indicates quantitatively when additional funds are necessary, the plan is primarily one of distribution of available funds.

From 1934 to 1948 the minimum salary for *Muskegon* teachers without a degree increased 122 per cent while the maximum salary for teachers with the master's degree increased only 67 per cent. In purchasing power the minimum rose 25 per cent while the maximum dropped 4 per cent. There were several years during this period when the purchasing power of the minimum salary increased while that of the maximum decreased. This trend was neither planned nor even suspected, yet the phenomenon was not peculiar to this school system alone.

Some businesses, industries, and school systems have recently adopted a policy of raising or lowering compensation in proportion to the cost-of-living index. While business and industry can regulate prices to conform to obligations, school systems usually have neither the power to tax or assess. Lacking any guaranteed method of increasing revenue, the schools may be unable to honor their commitments. For, although the operating revenue of a school system usually rises when the cost of living increases, these variations are neither proportional nor concurrent. Revenue usually lags both in amount and in time.

A study of these variations during the past 15 years demonstrates that the operating revenue of a school system may fall short of salary commitments by as much as 25 per cent.

The Muskegon Plan

The plan to be described consists essentially of three parts. Part I illustrates a general method of distributing among the teachers that part of the budget allocated for teachers' salaries. Part II advocates a specific plan for this distribution. Part III offers a method of determining what percentage of the total operating budget shall be allocated for classroom teachers' salaries.

Let us begin by setting up a salary schedule based on points instead of dollars. For illustrative purposes only let us assume Schedule A, the details of which we shall consider later.

SCHEDULE A OR M65.134

Service year	*No degree*	*B.A.*	*M.A.*
1	100 points	120 points	130 points
2	101	122	132
3	103	125	135
4	106	130	140
5	109	135	146
6	112	140	152
7	115	146	158
8	118	152	164
9	122	158	171
10	126	164	178
11	130	171	185
12	134	178	192
13	138	185	200
14	142	192	208
15	146	198	215
16	150		
17	155		
18	160		
19	165		

Each teacher, depending upon training and experience, is represented by a certain number of points. Let us suppose that the total number of points for the entire staff of classroom teachers amounts to 60,000 points and that the sum of $1,200,000 is allocated for that purpose. This means that each point represents $20. Therefore, the maximum and minimum salaries for all teachers would be as follows:

	No degree	*B.A.*	*M.A.*
Minimum	$2,000	$2,400	$2,600
Maximum	3,300	3,960	4,300

If Schedule A or any other were adopted in 1934, it is obvious mathematically, and investigation has proved it for arbitrary examples, that all of these figures rise and fall proportionally. In Muskegon, from 1934 to 1948 the nominal salaries based on this plan rose about 106 per cent, the purchasing power about 16 per cent. No matter what the school system, regardless of the particular schedule, the plan guarantees that, when economic conditions change, no group of teachers shall be favored over any other group. Under the plan the employer makes no commitment which he cannot fulfill.

In a more detailed report to the Muskegon Board of Education, Schedule A above was referred to as M65.134. It was arrived at after considering a large number of plans, and examining these for equability, usual practice, and expediency.

The 65 indicates that at each level of training each teacher has the opportunity of improving his financial remuneration by the same percentage, that is, 65 per cent.

The national average for increases between the minimum and maximum for a given level of training is somewhere between 65 and 70 per cent. The National Education Association recommends a figure of at least 100 per cent. The adoption of a salary schedule based on the latter recommendation would require greater resources if decent minimum salaries are to be maintained. In Muskegon, for example, it would have meant in 1949 about the following:

	No degree	*B.A.*	*M.A.*
Minimum	$1,665	$2,165	$2,331
Maximum	3,330	4,330	4,662

The minimum salaries under this plan would be far too small to attract new teachers. The highest figure that the Muskegon system could adopt within the limits of its present economic resources is 65 per cent. Other systems could use a higher figure.

The digit *one* after the decimal point in M65.134 indicates that there should be a probationary period of one year. However, instead of allowing no increase after one year of service, the schedule allows one full increase from the first to the third years of service, divided into approximately equal increments. The probationary period gives the employer sufficient time to determine whether the teacher is qualified to become a permanent member of the staff. At the same time, we find that by postponing the year of maximum salary we are able to offer both greater minimum and maximum salaries. The reasons are purely mathematical.

The digits 3 and 4 signify that nondegree and degree teachers shall receive annual increases of approximately 3 and 4 per cent respectively.

We believe that increases are most equitably allotted on a percentage basis. A rise of a few per cent in the consumers index, on this basis, affects all teachers uniformly. The figures 3 and 4 per cent enable all teachers to reach their maxima within the usual term of years, namely, after 14 to 18 years of service, respectively.

The letter M refers to the starting ratio of 100:120:130 for teachers with no degree, a

*Muskegon Junior College, Muskegon, Mich.

bachelor's, or a master's degree respectively. Numerous other ratios were considered, but the above, besides being simple, accords with usual practice. It is particularly expedient for Muskegon, and would favor more than two thirds of the teachers if adopted now.

A comparison of the minima and maxima of the two plans reveals the following:

	No degree		*B.A.*		*M.A.*	
	Min.	*Max.*	*Min.*	*Max.*	*Min.*	*Max.*
Present plan	$2,000	$3,400	$2,600	$4,100	$2,800	$4,300
Muskegon plan	2,109	3,480	2,531	4,176	2,742	4,534

Although the minima for degree teachers are slightly lower in the Muskegon plan the maxima are all higher than in the present plan. This means that even the small minority of teachers who would not be favored immediately by the new plan would ultimately gain by the change.

Any change from one plan to another will obviously favor some teachers to the disadvantage of others. This does not imply that the new plan is unjust to the latter group. It could easily be that the old plan was unfair to the former group. In any case, whatever dislocation or inconvenience imposed on the minority of teachers by the adoption of the Muskegon plan, at this time the losses are not considerable, and at worst are temporary.

The beginning salaries of the bachelor and the master differ by about $200, the maxima by some $350. The latter figure may serve as a financial incentive toward further training. It should encourage many teachers starting their employment with a bachelor's degree to earn a higher degree within a decade.

Allocations for Teachers Salaries

For cities of moderate size the national average allocation for teachers' salaries is somewhat above 64 per cent.

At least two serious objections could be raised against using a constant percentage for this calculation. The teachers could object that under such a plan, the board of education could readily employ more instructors than necessary at no added cost. The administration could object that after the needs of the teachers had been met by the operating budget, some of the remaining funds should be used for better maintenance, the improvement of physical facilities, and for the provision of services usually neglected in less favorable financial circumstances.

A fair percentage of the budget for classroom teachers' salaries should depend upon the following variables:

a) The training and experience as well as the number of teachers on the staff.

b) The cost of living index. When this index rises, an increase in salaries should be indicated, though not necessarily in the same ratio as the index variation.

c) The purchasing power of the budget. This figure can be large when the cost of living is small, and vice versa. When it is high it should be possible to meet instructional needs with a smaller percentage of the budget.

d) The requirements of other budgetary expenditures. It is assumed that if teachers' salaries are increased or decreased, so also shall the salaries of other school employees. Maintenance and fixed costs in Muskegon, and probably in most cities, are such that the variation in the teachers' percentage of the budget cannot practicably differ from 64 per cent by more than 2 per cent in either direction. We have, therefore, set minima and maxima, respectively, of 62 and 66 per cent.

Let us consider the formula $X = \frac{6PI}{B} + 33$,

where X is the tentative percentage of the total operating budget, B, to be allotted for classroom teachers' salaries, P represents the total number of points of the staff under plan M65.134, and I is the cost of living index.

If X is a number between 62 and 66, we use this value. If X is less than 62, we shall use 62, our predetermined minimum; if X is greater than 66, we shall use the latter figure, our predetermined maximum.

The above formula satisfies all of the conditions outlined above. We shall omit any mathematical discussion of its derivation except to note that the factor 6 is purely empirical, and depends upon local conditions. The constant term 33 is a stabilizer. It limits commitments when the purchasing power of the budget is small, and distributes part of the "surplus" under more favorable circumstances.

Dr. J. Chester Swanson
Superintendent of Schools
Oklahoma City, Oklahoma

Dr. Swanson, who was elected superintendent of the Oklahoma City schools to succeed Fred W. Hosler, assumed his new office on July 1, 1950. He was formerly deputy superintendent of schools, and previously had been assistant superintendent in charge of business affairs at San Diego, Calif.

Dr. Swanson, who was graduated from the University of Richmond, Richmond, Va., in 1926, received his M.A. degree in 1929 from Duke University and took his PH.D. degree from the same institution in 1935. He has done advanced summer work at the University of Pittsburgh, Johns Hopkins University, Michigan University, and Columbia University.

His teaching career began with his appointment as director of industrial training in the Panama Canal Zone, in 1937. Later he was educational consultant in the U. S. Office of Education from 1941 to 1943. He became assistant superintendent of schools at Allentown, Pa., in 1943. In 1947 he was elected assistant superintendent at San Diego, and in 1949 he was made deputy superintendent in Oklahoma City.

Dr. Swanson is a member of the Association of School Business Officials and the American Association of School Administrators. He is a frequent contributor to educational periodicals.

Assuming a staff of 59,000 points and an index of 167.5, we obtain the following results:

	Operating Budget	*X=Percentage for Teachers Salaries*		*Amount for Teachers Salaries*
Below	$1,796,818	66.00	*Below*	$1,186,000
	1,800,000	65.94		1,187,000
	1,850,000	65.09		1,204,000
	1,900,000	64.21		1,220,000
	1,950,000	63.44		1,237,000
	2,000,000	62.65		1,253,000
Over	2,044,655	62.00	*Over*	1,267,000

The value of X, the tentative percentage, furthermore, gives a quantitative evaluation of the economic state of the school system. Small values of X indicate a favorable condition, large values unfavorable. If X is greater than, say, 65, it indicates that the school system must either reduce its services or increase its income.

Again, the formula can be used for an approximation of the next year's financial needs. Thus, if we let $X = 63$, we obtain $B = \frac{1}{6}$ PI.

There are other implications in the whole plan which, for the sake of brevity, we have omitted. There are many things the plan cannot do, nor does it pretend to. It cannot and does not provide more money for the school systems. It does not guarantee fair salaries for teachers. It does, however, provide that teachers get a fair share of the total budget, and that no group of teachers shall be favored over any other. We do not pretend that the plan is perfect, nor that a perfect plan exists. We do, however, believe that the Muskegon plan is superior to any other plan known to us. It is on this basis that we offer it to any school system that agrees with this evaluation.

We welcome criticism and other points of view, and we shall be glad to clarify any part of the plan whose explanation may be lacking in detail.

THE BOARD OF EDUCATION

The board of education is a responsible official body, not a group of individuals. The board provides for a school system and establishes general policies in keeping with the wishes of the community and the requirements of state law: (1) it informs the public of the education, physical, and financial needs of the schools, and of the broad policies and planning within the schools; (2) it directs expenditures, and approves sites and buildings; (3) it advises with the administration and passes upon recommendations of the administrative personnel; (4) it evaluates the effectiveness of the program recommended and projected by the administration, and holds the superintendent and others in places of trust and leadership responsible for results. — ***A. C. Kratt.***

When the School Board Buys —

Is the Customer Always Right?

*Dave E. Smalley**

Very few people like to think they are being humored, because that implies one of two things: Either they are so temperamental they resent being shown up wrong, or they are being coddled for future favors. Nevertheless the old slogan, *The customer is always right,* is based upon exactly these premises.

It is rather common practice among suppliers, especially in the more competitive fields, to overlook the discrepancies of good customers, to agree to minor demands, and even to admit small mistakes they did not make. Keeping the customer happy is essential in a competitive market, even though the cost sometimes makes a dangerous inroad on profits.

If the concession is necessary to meet competitive prices or quality, the buyer is fully justified in expecting it and the supplier should accept the situation accordingly. The supplier has no more right to exact a penalty of his customer than the customer has to expect a tribute. The rule should work both ways, as any fair-minded person will agree. The trouble is, it doesn't.

Disadvantages of Suppliers

In a competitive market the supplier is always at a disadvantage. The customer, on the other hand, has a number of available sources from which to fulfill his wants, and therefore he enjoys a large measure of independence. Sometimes the customer takes advantage of his position and makes unreasonable demands. Often he does not, but when the question of an adjustment arises, the supplier is likely to make concessions, even unjustified ones, rather than take chances of offending and losing the customer.

If the supplier is a jobber he can sometimes recover such losses by making similar demands of the manufacturer. Becoming a customer himself, he can hold a frank or implied threat over the manufacturer's head who is no more anxious to lose a customer than the supplier had been.

Unfortunately, the manufacturer has little or no recourse, since his suppliers of raw materials are narrowed down to a less competitive and much more independent field. The manufacturer usually buys on his supplier's terms which almost always are inflexible, so much so that the average manufacturer seldom thinks of challenging them. Take, for instance, the matter of cash discounts which some suppliers of raw materials allow and which some do not: If 1 per cent discount is allowed and the manufacturer takes 2 per cent, he is promptly told of his mistake, no matter how small the amount; and probably his check will be returned. If he pays on the eleventh day from date of the invoice, he is not allowed to deduct the cash discount which must be taken within 10 days. If he does take the discount after the 10-day period, $10 worth of correspondence will ensue to regain a $3 wrongful deduction.

But these hard rules, these "cold-blooded" business adjustments, are pretty much taboo in the more competitive consumer market. It is a common practice for suppliers in the latter field to charge off the customer's unearned discount deductions without a protest, lest the good customer consider him petty and become offended.

Wisdom of Winning an Argument?

Although the supplier must pay his own bills promptly, he often lets his own good customer go far beyond the limits, dreading to press the matter of collection. He takes back merchandise and allows credit, sometimes when nothing is wrong with the goods; and on occasion he has been known to accept merchandise that wasn't even his, fearing that a protest or even a mention might appear as a challenge to the customer's integrity. There is another old adage in the competitive field about winning an argument and losing a customer.

Now this writer was once himself a customer in a competitive market, and for quite a while before he became a supplier, and he is therefore more or less familiar with both angles of the problem. He very well remembers the feeling of independence that he and his associates enjoyed when they dispensed their patronage among eager solicitors. Price and quality being even, it took very little argumentativeness or fumbling on the part of the supplier to lose favor. And those suppliers who stood in highest favor went out of their way to keep in our good graces. There were times when we felt at liberty to be critical, possibly unreasonable and a little abusive, simply because we knew we could get away with it.

Looking back upon this later, from the other side of the situation, the writer has often experienced little feelings of remorse as he became conscious of those small, semi-autocratic injustices, nor is there consolation in the fact that these practices continue and are expected and even promoted by the supplier himself.

But the customer frequently has his troubles, too, and very real troubles in his business interchanges with his suppliers. Often he is justified in his complaints and demands, even in occasional expressions of resentment. Suppliers sometimes tax the patience of a saint with their mistakes and bungling. The only defense for them is that mistakes are human and the bungling seemingly unavoidable.

Tolerance for Errors

Knowing, as the customer should, how much the supplier wishes to keep his good will, he has need for a little tolerance. Bad as he may feel about the mistake, the supplier undoubtedly feels worse. And it seems sometimes there is an endless array of errors all lined up to happen, just to provoke the customer and agonize the supplier.

Management cannot be everywhere at the same time, and even if it could, management is still represented by fallible human beings. A lot of important transactions must be trusted to employees who are there to do a day's work and who are not always too concerned about the good will of the customer. In their hurry they grab up the wrong thing and ship it, or they ship the right merchandise the wrong way, or they just don't ship anything at all. Usually the management never knows about it until the customer complains.

The supplier can scold, even fire his help, to be sure, but even if the customer knew about it, it would be poor consolation, and then new employees even multiply mistakes.

This is not to excuse actual incompetence, either on the part of the management or its help, and there is no question some suppliers make more mistakes than others. Too many mistakes in a row is justification for the buyer to take his business elsewhere, but even so a series of fumbles sometimes do occur in the best regulated firms.

Business must, of course, operate by a system, but frequently — well almost always — the system becomes a routine, and transactions which call for special handling are nearly always a hazard. A case in mind was that of a large school system, the superintendent of buildings for which gave the salesman an order with strict instructions not to mail the invoice or make delivery until the official purchase order was received. The order was placed at the time because of a temporary price concession. To make sure there was no slip-up, the salesman supplemented his written instructions with a telephone warning. The sales manager made a special trip to the billing department to verbally transmit the warning. The billing department made special notations and apparently everything was made safe.

However, the machine was shipped the next day, with the invoice following promptly. Luckily the building superintendent who placed the order intercepted the invoice and very

*Brazil, Ind.

generously accepted and stored the machine. A month later the delayed purchase order, making the transaction official, had not yet arrived, but the credit department sent through a statement, making a bad situation worse by the embarrassment it caused the building superintendent. Luckily again he was a very tolerant man with a lot of patience and human understanding, all of which the supplier had stretched to the snapping point.

Menace of Credit System

This whole triple fumble was the result of by-passing an established system, and while it may seem inexcusable to the victim or even to the bystander, one has only to work a while inside a routine to realize the hazards of stepping out of it.

Another menace to the supplier's eager efforts to retain customer good will is his credit department. Almost always and in probably all organizations which sell for a profit, there is an inherent feud between the sales and credit departments. It is the business of the sales department to keep the customer happy so he will continue buying. It is the business of the credit department to see that the customer pays for what he gets or neither of these departments are likely to continue.

Whether it is natural or cultivated, there is a wide difference between the viewpoints of the sales manager and the credit manager. To the sales manager and his salesmen it often seems that all the good will they have spent months to create is being destroyed in a single letter by a matter-of-fact, exacting credit manager.

But the credit manager's job is not an easy one either. It is always pleasanter to sell than to collect and whoever takes the job of collecting puts himself in social jeopardy.

System in the collection department is especially essential, but like all systems it becomes routine. Because it is usually too big and complicated a task to handle accounts as individual cases, collection forms are used and they are scheduled to function by successive steps. At the end of 30 days a statement is sent. If no response is forthcoming in 15 days a formal request is made by letter. If still no action, a second letter follows in another 10 days, each successive letter becoming a bit sterner in its tone until it finally becomes a threat.

What the customer does not always understand is the fact that these letters are not written especially for him, though they are made and intended to have that appearance.

Naturally if the customer ignores all the letters and lets the routine run its course, he may eventually find himself being sued, which is the culmination of nearly all collection systems.

There is nothing intrinsically wrong with the system, but like everything else it can and does sometimes run afoul, and when it does the situation can be very bad. For instance, a school customer may have a legitimate reason for withholding payment but which reason never reaches the credit department, or if it does it fails to receive proper recognition, and the collection routine proceeds on its deadly course. Only those on the inside really know the agony such blunders cause the supplier. Explanations seem ineffectual and apologies useless. In such cases if the victimized customer could only visualize the havoc in the supplier's home office, he would forget his anger in a little surge of compassion.

As an example of how a collection routine can sometimes run itself into ridiculous as well as disastrous dead ends, a firm once used a form letter which suggested if the debtor could not pay the full amount at the time, to pay half and the balance later. This letter went to the S. S. Kresge Co. for 68 cents balance, the result of some discrepancy or misunderstanding in invoicing or paying.

Suppliers All Have Problems

Yes, indeed, the customer has his troubles due to the fumbles and bungling of the supplier. Often he has just cause for complaint and in some cases for becoming downright angry. But as we have tried to show in the foregoing, if it is any consolation to the customer, the supplier feels worse about his mistakes than the customer does. The latter can get a new supplier, but it is not so easy for the supplier to get a new customer.

Again we plead for tolerance on the part of the school executive, an effort to understand the supplier's problems and to overlook as many of his shortcomings as the customer can. Rest assured a new supplier will soon prove to be as humanly fallible as the first one. He may not make the same mistakes but he will make some different ones.

And of course no self-respecting school business manager or purchaser wants to be humored just to keep his business. Neither does he want his supplier to fearfully say he is right when actually he is wrong. Certainly he doesn't want to be coddled.

As everybody knows, the customer is bound to be wrong part of the time, and the fact should be recognized and accepted by both parties in the transaction. There should be no threat of retaliation, real or implied, on the part of the one, nor any groveling fear or subjection on the part of the other. In any dispute good businessmen should meet on common ground, co-operate in an effort to establish the facts as they are and abide thereby.

Pausing to analyze its real import, the old adage that "the customer is always right" is an affront to the customer's dignity as well as his intelligence and merits his indignation.

Keep your eye on the humble school board member. Perhaps he is lying low to humble you.

Toledo Begins Long-Range Building Program

The board of education and city officials of Toledo, Ohio, join hands in ground breaking for a gymnasium and community center addition to the Gunckel School. Left to right: President Edward C. Ames, Toledo Board of Education; Grant M. Murray, member of the Board; and City Councilman James B. Simmons, Jr.

The Taft Athletic Track, as it appeared in July, 1950, after the running tracks had been laid and before the bleachers, etc., were placed. **See next page →**

Oklahoma City Constructs—

Athletic Field for City-Wide School Use

N. L. George

The early high schools in Oklahoma City, Okla., were erected on small sites. The modern all-year physical education and athletic programs have been seriously handicapped by these sites. Luckily, the board of education has owned approximately 38 acres in an area which can be adapted for recreational use. In a long range program for the development of this area, the board has, as a first step toward improving the physical education program, constructed one of the most modern and up-to-date running tracks in the Southwest.

Some of the outstanding design features are as follows:

1. The track is 32 feet wide, measured from face of curb to face of curb, enclosed by concrete curbing 27 inches deep.
2. There are two straightways, each 735 ft. long.
3. The track is drained with 6-, 8-, and 12-inch vitrified clay tile, covered with a pervious limestone rock fill.
4. The rough fill of the track consists of 16 inches of limestone rock with a topping composed of 6 inches of high quality volcanic cinders. The cinders have been mixed with a small amount of clay for binder.
5. There are 4 runways for field events 3 ft. 6 in. wide, constructed with the same rock and cinder cross section as the running track.
6. There are 6 jump pits, and 4 rings for shot-put and discus throwing.
7. The runways, jump pits, and throwing rings are also enclosed by concrete curbing.
8. The track has been marked for both metric and yard races. These markers are brass plates set in the curb with starting and finishing information stenciled thereon.
9. The main axis of the track is north-south.

This track was designed to provide a maximum of utility for the Oklahoma City school system's athletic program. For example, the following events may be participated in simultaneously:

1. Four separate 100-yard dash races
2. Four broad-jump events
3. Two high-jump events
4. Four shot-put or discus events

Or if the coach prefers, there may be:

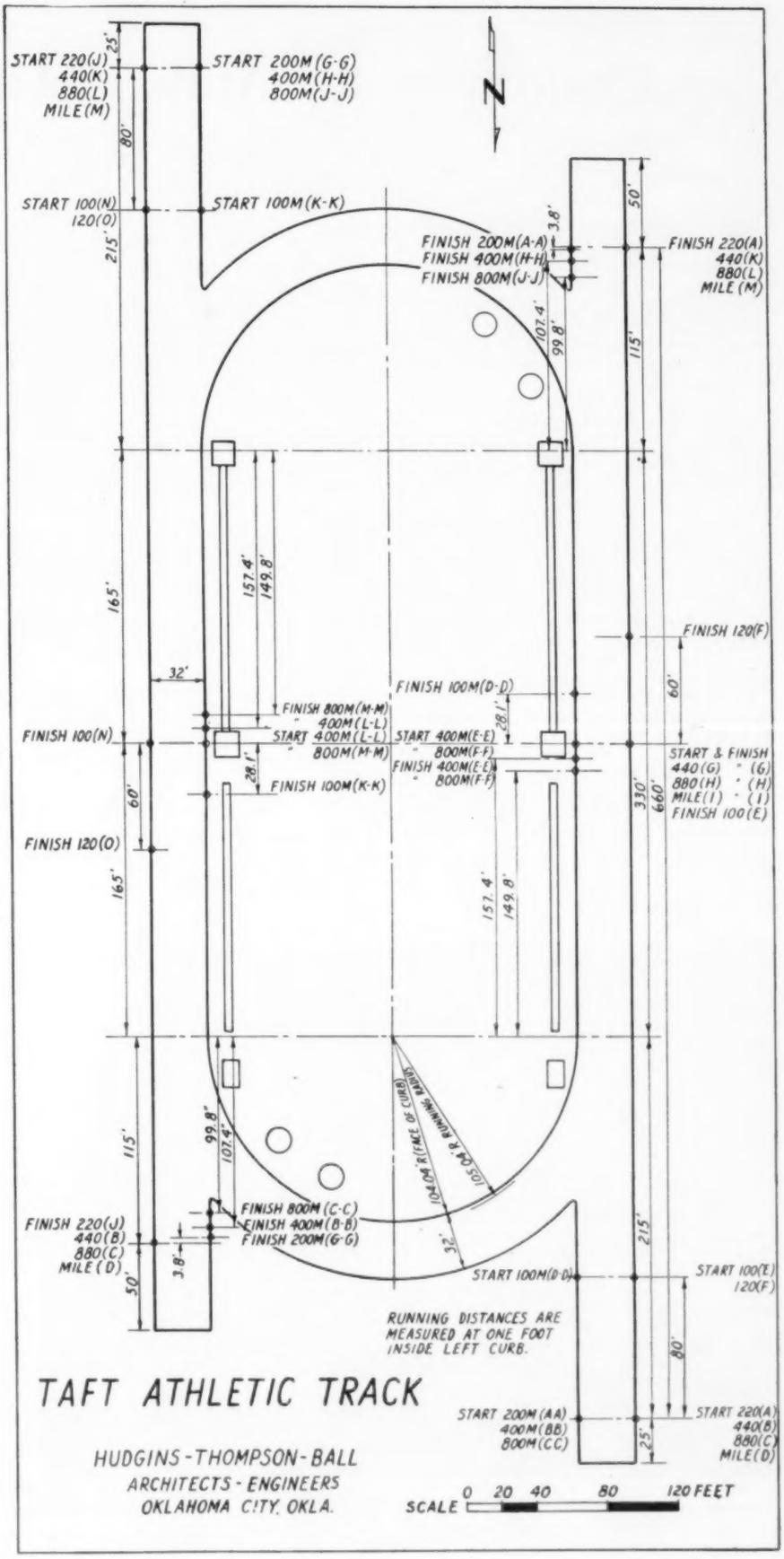
1. Two separate 220-yard dash races or hurdle races
2. Two pole vault events
3. Four high-jump events
4. Two javelin events

Or, it is possible to hold simultaneously:

1. Two separate 120-yd. hurdle races
2. Two 100-yd. dash races
3. Six high-jump events

The resulting multiplicity of events that may be participated in at the same time greatly augmented the spring athletic program of the Oklahoma City school system during the spring of 1950.

The track was constructed by Pennington and Winter Construction Company of Oklahoma City, Okla., and the engineers were Hudgins-Thompson-Ball and Associates, architect-engineers, also of Oklahoma City.



A Study of Policy—

Uniformity for Athletic Administration

*Floyd G. Hoek**

During the past few years, the Asbury Park board of education has encountered difficulties in connection with athletic insurance and the formulation of a policy on the duties of the "team physician." The collective problems were brought to a head about the time several serious injuries cost more than the maximum allowance set up in the insurance policy in force.

The Insurance Study

Early in the present year the secretary of the board of education sent a questionnaire to 50 communities comparable in size with Asbury Park, to ascertain facts helpful for establishing an improved plan of protecting both the athletes and the schools. Forty replies were received. Of these, 5 schools pay one half the cost of insurance, and the athletes the other half; in 3 towns the athletic association pays half; and in 1 city the school pays on a request of a player; in 4 cities, the athlete pays all the insurance; in 13 cities the athlete pays nothing.

In 19 cities the board assumes no medical expense of athletes not covered by insurance; in 1 the local athletic fund pays; in 1 the parent pays; in 1 the general athletic fund pays; 1 school pays a limited amount per injury; in 1 city each student pays an amount into the injury fund and the athletic association matches these payments; if sufficient funds are not available, the cost is charged pro rata to all the students. In 3 towns the athletic association pays the cost of the medical and surgical services.

The problem of insuring athletes in school competition has caused the state laws to be amended or more broadly interpreted to permit boards of education or interested athletic groups to insure schoolboy athletes. In 14 schools the board of education carries insurance which completely covers athletes in sports; in 19 cities the boards carry no insurance; in 1 city the insurance extends to $500; in 2 cities coverage is for football only; 1 insures for major sports; 1 city insures to a limited amount for all injuries; 1 city carries self-insurance; 1 city limits expenditures to $250 for one accident; and in 1 city the insurance is carried by the athletic association.

A study of the foregoing shows that there is no uniformity of plan for athletic insurance. Uniformity, however, should prevail, and the legal status of the boards of education should be the same. Out of the experience of a uniform policy should grow legislation which will improve the protection of both athletes and school boards. The duty of boards should not be shirked by letting some athletic association group assume the responsibility. There is no need for such athletic groups to enter the insurance business on a profit basis, or to coerce by quiet propaganda the taking out of insurance.

*Secretary, Board of Education, Asbury Park, N. J.

A Local Policy

Following our inquiry into the practices of other boards of education, Dr. Joseph F. S. Carter, a member of the athletic committee of the Asbury Park board of education, worked out the following statement of policy which has been adopted by the board:

The Asbury Park board of education realizing the need of protecting its athletes against the medical costs of injury, but not admitting any liability on its part, has taken the following stand, and with these reservations:

The board will pay one half the insurance premium of each contestant designated by the head coach, provided the athlete pays the other one half.

In case the medical bill includes medicines, X-ray, surgery, hospitalization, or any expenses incidental to the amount covered, or not covered, in the insurance policy, the board is not to be held responsible. In fact, no financial obligation is to be assumed by the board in these cases other than one half the insurance premium.

Those athletes not insured compete at their own risks.

Up to the time when the head coach turns in the names of the players to be insured and the subsequent issuance of the policy, the contestants are competing at their own risks.

Grammar school athletes compete at their own risk.

The Team Physician

The "team physician" is a doctor employed by the board of education whose duty is the care of school athletes.

A study of the policies of 40 school systems indicates that 18 employ a team physician; 8 depend on the school physician for the service; 11 do not hire a team physician. Several school boards depend on local physicians for voluntary services, and 2 employ both a team physician and a school physician.

The period of service of team physicians varies from 12 who are engaged for a single school year, to 1 who is engaged for the football season, and 5 who are engaged for the season of a given sport only; 13 team physicians handle only emergency cases; 2 do not handle such cases; and 1 school depends on the team physician at games only. Fourteen schools send athletic cases to a medical authority designated by the board; 6 permit the student to select his own doctor; 1 sends students to the team physician for football injuries only; 1 school sends injured students to the team physician during games only; and 1 school sends the students to the team physician unless they prefer another doctor.

Team physicians are required to attend all contests at home in 7 communities; home football games in 3 towns; 10 both home games and away from home; 1 school requires the physician to attend such games as he can at home and abroad; and 7 require attendance for football games only at home and abroad.

In 14 communities the team physician examines all athletes for fitness to participate in games; 4 cities require the school physician to make the examination; the remaining schools enlist the school physician's services.

In 16 towns the team physician is subject to call; in 1 community during games only; and in 1 town he is not subject to call; 7 schools depend upon the medical inspector for emergency calls.

Accident Reports

The team physician is required to report injuries to the board, in 1 town yearly, in 1 town twice a year, in 1 town weekly; 4 schools require no reports; 4 require a monthly report; 1 requires a report to the director of athletics; 1 requires a report only when requested; 1 requires reports at indefinite stated times; 1 requires reports monthly and at the end of the season; 1 at the end of the sports season; and 1 when occasion demands.

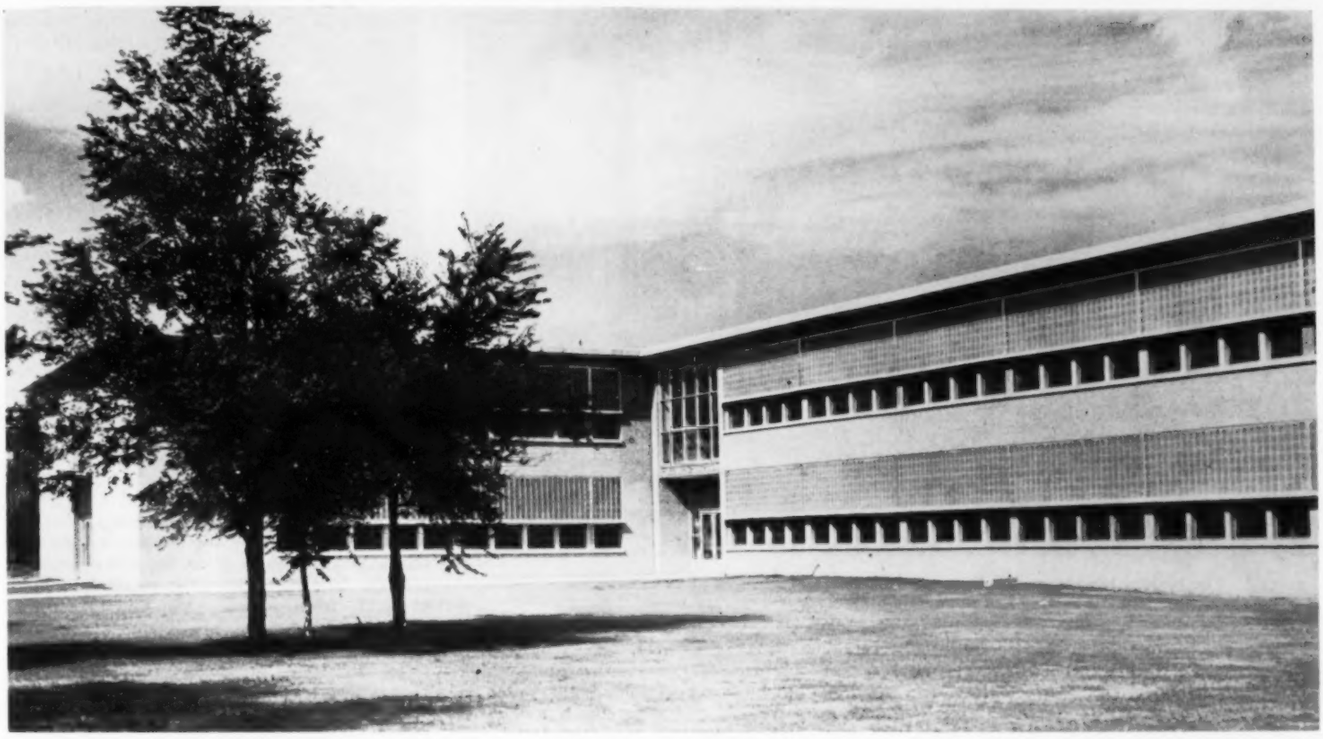
Team physicians are required to report cases in 10 communities to the board of education; in 1 to the health board, and then to the board of education; in 1 to the coach. Seven communities require no reports of cases; 2 require reports to the athletic director only; 1 to the coach; 1 to the athletic alumni association, with a statement of cost. The athletic department in 1 city reports to the board; in 1 city the coach reports to the board; in 1 city the department reports to the athletic council; in 1 city to the coach and the athletic director; in 1 only insurance reports are made; and in 1 reports are made to the medical inspector.

Compensation of Physicians

There is a great variance in pay. One city pays $1,400 per school year; 1 community makes a gift at the end of the year; 1 city pays $200 in addition to his regular medical salary; 1 community pays $350 plus X-ray fees; 1 city pays $200 from the athletic fund and 50 cents per capita for the athletes; 1 school system pays $300 per season for high school games and $10 per game for junior high schools. In one city the team physician receives $150 for attending games and $100 for office calls; 1 school system pays $15 for double-header games, $7.50 for football games, and $3 per hour for all other sports. Thirteen schools pay at the end of the sports season; 2 pay twice annually, and 3 annually; and 12 are paid by the month.

Nine school systems include office calls as a part of the salary payments; 14 schools pay separately for office calls. The physician is not paid for the first office call in 11 communities; he is paid in 1 community; 1 community refers the student to the family physician and to the insurance company; 8 communities pay for office calls after the first; 8 do not pay for such calls. Three communities depend upon payment by the insurance company, and 1 pays in unusual cases. Six communities do not pay for X-rays;

(Concluded on page 89)



The Hobbs High School, Hobbs, New Mexico, as seen from the southwest. All the rooms are fitted with a vision strip and continuous bank of directional glass block. — Vorhees & Standhardt, Architects, and M. Swatek, Associate, Roswell, New Mexico.

Hobbs Builds for Permanence

Charles L. Mills*

The city of Hobbs, New Mexico, is living evidence that the United States is still a young, growing nation. Less than twenty-five years ago, the center of the present city of 25,000 people was one house and two trees; its school system which now enrolls more than 3000 children was a two-room country school serving a sparsely settled farm area.

The discovery of oil in the late twenties, in the extreme southeast corner of New Mexico and in near-by Texas, turned Hobbs, then only a rural spot on the map, into a booming, roaring oil town. There was every confusion in the social and political life, and the schools suffered badly from growing pains.

During the early years of the boom, people and their children flooded into Hobbs in such numbers that all available housing facilities — even tents — were filled to the bursting point. The school children in the early thirties were taught in frame shacks set down here and there on the wind-swept land; they were cold in winter, hot in spring and fall, and dusty always.

At one time there were two town governments, two post offices, two school districts — and bitter rivalry. Finally, common sense caused the consolidation of the original and

Typical classroom darkened for the use of audio-visual aids.

*Hobbs Municipal Schools, Hobbs, N. Mex.

The biology laboratory is fully equipped; a large collection of specimens for study is maintained in an adjoining work and storage room.

the new Hobbs, and the energies of the whole community were channeled in the direction of unified growth.

Like the town, the schools had troubles arising from the too rapid growth. Much credit must be given to the early school boards and their superintendents, and to civic-minded men and women who labored unceasingly through the years to build up an efficient, wholesome system of schools, dedicated to the best interests of the children.

The School Plant

In 1938 and 1939, two permanent brick school buildings were erected with the help of Public Works Administration funds. These buildings now house the junior high school and an elementary school.

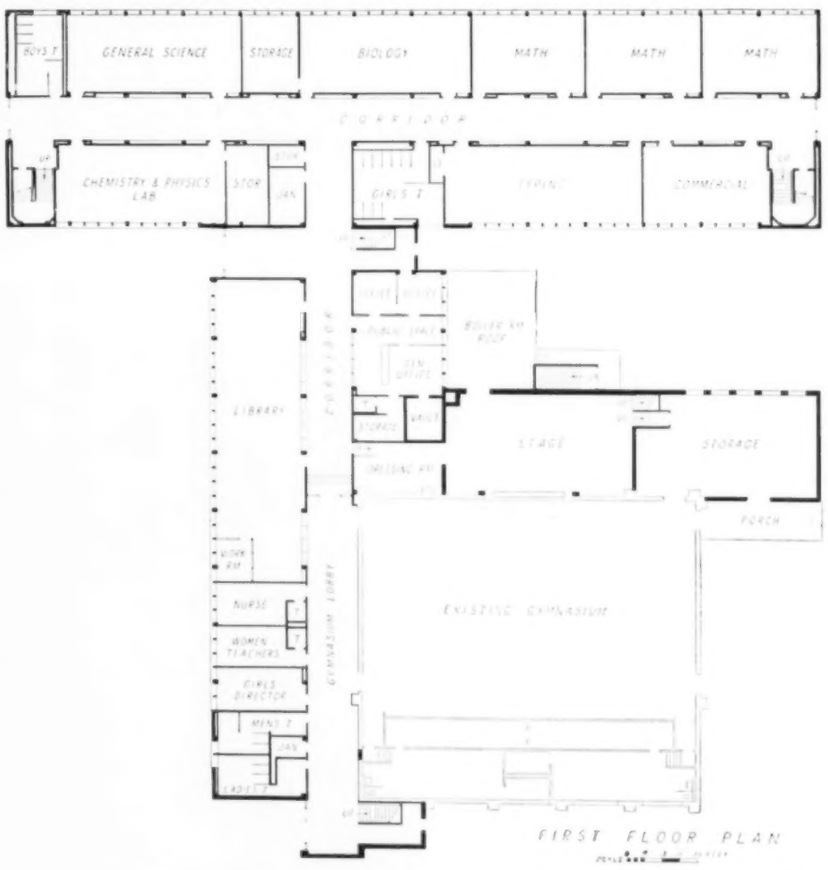
Disaster struck the schools in 1942 when the high school, built in 1936, was completely destroyed by fire. Only the gymnasium, located some distance from the main building, was saved. Wartime restrictions on building construction, unfavorable priorities on the purchase of materials, and rising costs combined to prevent the rebuilding of the structure. In this emergency, the senior high school was transferred to the junior high school building and unsatisfactory double sessions were arranged. The high school gymnasium was partitioned off into classrooms into which the junior high school classes were squeezed. Portable frame buildings were bought relieving the double sessions, and finally, after Hobbs Air Field was closed down, barracks were converted into academic rooms, shops, and laboratories.

In the meanwhile, the elementary school enrollment continued to grow so rapidly that the board felt compelled to erect a 12-room elementary building as its initial postwar project. At first, this modern brick structure contained classrooms only. Arrangements were included in the plan to allow for the addition of a cafeteria and a gymnasium-auditorium. Put into service in 1946, this plant cost about $12.50 per square foot.

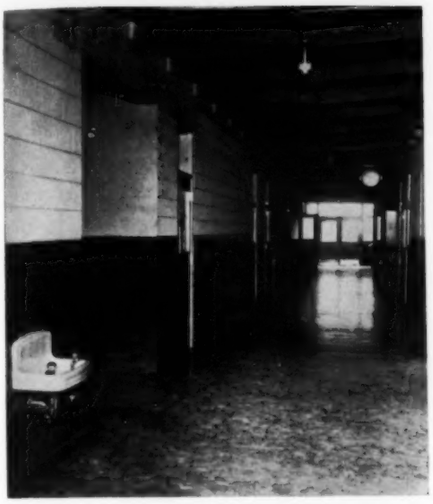
Financing Difficulties

The school laws of New Mexico permit school districts to vote and to have outstanding at one time, for school building purposes, bonds which represent 6 per cent of the total assessed real property valuations of the district. In Hobbs this caused considerable difficulty because the total valuation for tax purposes has amounted to slightly over $12,000,000. The taxpayers have voted their limit of bonds from year to year, and the Hobbs taxpayers are consequently paying the highest interest and sinking fund tax rate in the state. In spite of these sacrifices, it has been impossible to keep the number of permanent classrooms abreast with a growing enrollment of children, particularly in the grades.

A corner in the office of the Hobbs High School.



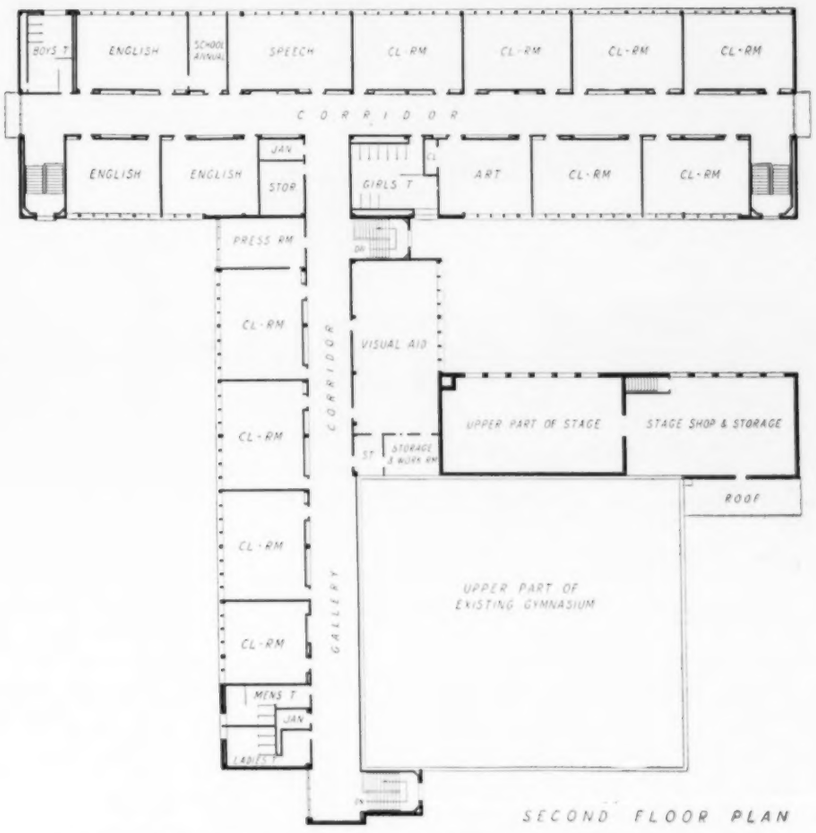
First Floor Plan, Hobbs High School, Hobbs, New Mexico. — Vorhees & Standhardt, Architects, and M. Swatek, Associate, Roswell, New Mexico.



Corridor, Broadmoor Elementary School, has glazed brick wainscoting, concrete block walls, and battleship linoleum floor.

During the past five years the attendance has grown at the rate of one new elementary school each year.

The board of education decided in 1948 that the high school problem could not be deferred and bonds were issued and plans accepted for a complete senior high school building. In 1949 additional bonds were sold and contracts were let for two elementary school buildings. Because of limited funds available, authority was received from the state to proceed in the erection of these buildings on the basis of cost, plus a fixed fee for the contractor's services. The Lembke Construction Company, of Albuquerque, was employed to erect the buildings on the basis of the architect's estimate with a fixed fee. The board acted as purchasing agent of materials, let the several contracts, and paid all bills, including lumber bills. It maintained its own accountant and clerk of the works. The members of the board and the administrative staff worked overtime to solve the problems which arose from day to day in connection with this large construction job. The extra work of the board, however, paid out in the fact that sufficient money was saved on the construction of the buildings to do the skeleton construction of two additional elementary schools.



Second Floor Plan, Hobbs High School, Hobbs, New Mexico. — Vorhees & Standhardt, Architects, and M. Swatek, Associate, Roswell, New Mexico.

The Three New Buildings

The three recently completed buildings, which are highly functional in design and plan, were designed by Architects Vorhees & Standhardt, of Roswell, N. Mex. In plan,

Typical Entrance Doors, Hobbs High School.

The library, Hobbs, New Mexico, High School, is distinctly a working unit.

Southern Heights Elementary School, Hobbs, New Mexico, as seen from the street.— Vorhees & Standhardt, Architects, and M. Swatek, Associate, Roswell, New Mexico.

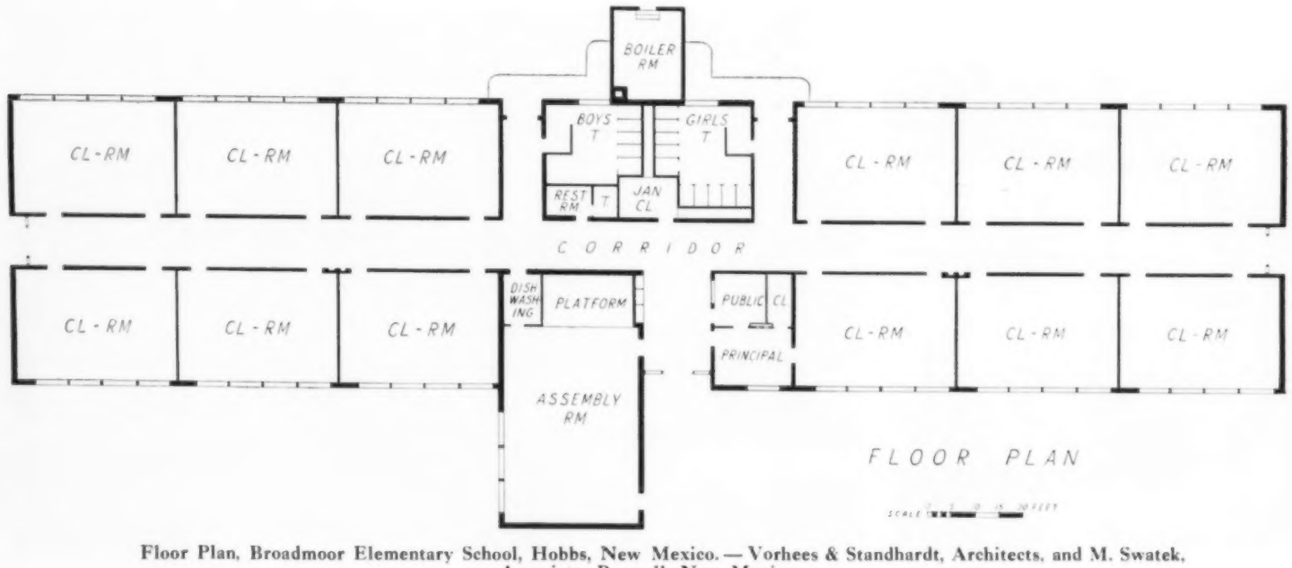
exterior design, construction, and equipment they incorporate the latest trends in modern school construction. The buildings are fully fireproof and make considerable use of directional glass block and acoustical materials. Great care has been taken in finishing the classroom walls in high-reflecting colors. The elementary schools have wainscoting of light-red, polished brick. In the high school, glazed tile has been used for wainscoting in corridors and other areas subjected to heavy use. The buildings have been commended by local citizens for their great attractiveness.

The senior high school, which contains 25 classrooms and laboratories, a library, and offices, was built around the existing gymnasium. Of tan brick, with a reinforced concrete superstructure and flat roof, with asphalt tile floors throughout, the building is almost completely fireproof. The modern functional beauty of the building is keynoted by the panels of directional glass block above the vision windows in each room. These blocks greatly increase the natural lighting of the rooms.

Adequate laboratory space for chemistry, physics, biology, home economics, and commerce is provided on the first floor. A soundproof, air-conditioned room, completely equipped for showing films, is located on the second floor of the building. This room is so built that radio equipment can be installed later, making it a broadcasting studio as well.

The present structure represents only the first two units of a proposed four-story-unit high school building. The other two units, containing permanent shop, music, and home economics facilities, additional gymnasium space, an auditorium, and a cafeteria, will be postponed until classroom needs in the grades have been met.

The two elementary buildings, located in new housing additions to the north and south of the city, are skeletonized only. With identical floor plans, these buildings contain the minimum essentials for effective use. Such desirable but not absolutely essential features, as tile floor coverings, acoustical ceilings, lockers, and permanent lighting fixtures, will be added later. All interior walls are of unplastered concrete, which has proved entirely satisfactory and very economical. Vulcan hot water heating systems eliminate the need for



Floor Plan, Broadmoor Elementary School, Hobbs, New Mexico. — Vorhees & Standhardt, Architects, and M. Swatek, Associate, Roswell, New Mexico.

Second Floor Corridor, Hobbs High School.

End Elevation of new Elementary School building, Hobbs, New Mexico, showing the slope of the roof toward the central corridor.

costly underground pipe trenches. Floors are of finished concrete, with tile in the restrooms.

The classroom ceilings are 12 feet high adjoining the outer walls, and 10 feet high near the corridor walls. The roofs slant toward the center of the building, simplifying roof drainage problems and giving more and better natural light in the classrooms. A large, multipurpose room juts out at right angles to the main building and is used as (1) an audio-visual room, (2) a cafeteria, (3) a grade assembly room, (4) an indoor playroom, and (5) a meeting room for adult groups.

The high school building, as completed to this point, costs less than $10.50 per square foot. Buildings erected at the same time in neighboring Texas and New Mexico towns where labor and material costs are comparable, cost from $13 to $15 per square foot. The skeletonized elementary schools have been built for less than $6.50, and it is expected that they can be completed with the addition of acoustic ceilings, asphalt-tile floor covering, permanent fluorescent lighting fixtures, lockers, etc., at an additional cost of only $1 per square foot.

These three buildings represent only a part of the Hobbs long-term building program. More classroom space is badly needed at the junior high school and elementary levels. The board also recognizes the fact that some special rooms to enable all of the schools to enjoy a balanced educational program are needed. The educational plant planning is considered a continuing process with changes and additions to be made each year as the enrollment increases and the program grows — and the board acquires funds. The recent experience of the board in erecting the newest school buildings indicates that the construction method adopted is well worth the additional time and the great effort given by the staff. The plan does provide the most classrooms for the least amount of money, in the shortest length of time. The board is inclined to recommend this method of construction to those school districts which wish to get the greatest value received where limited funds are available. The buildings erected in Hobbs are of the permanent type which will be of the greatest economy.

Riverside's New Junior High School

*Harry K. Young**

The Jurupa Junior High School will be the fourth high school building in Riverside to house a three-year school embracing the seventh, eighth, and ninth grades. It will be the first of our junior high schools to be built outside the incorporated municipal area of the school district. The school is intended to serve an area of inexpensive suburban homes, small farms, and lots of children.

Since the termination of the war, the outlying areas of the school district have grown with greater rapidity than the central incorporated area. Ten years ago, we were using school buses to haul about 800 children from our rural areas to our city high schools; today, we are transporting about 1800 high school children every day.

To relieve our burden of transportation and to provide a school for the students of the largest of the unincorporated areas, a 30-acre site was purchased near the geographical center of this territory. Fortunately, the geographical center is also close to the population center; in fact, it is within one half mile of the center as determined by spot maps of our students' homes. To erect this new building we have an initial allowance of $400,000 out of a general school bond issue for $3,000,000.

The building has been planned to provide immediate accommodations for 600 students. The layout of the plans and the arrangement of the electrical, heating, and sanitary services is such that additions can be readily made in the form of classrooms, a gymnasium, an auditorium, service rooms, etc., as the enrollment grows.

Attention has been given to making the plan sufficiently flexible so that the organization can be changed to a four-year junior high school or a six-year junior-senior high school. The addition of certain rooms and equipment for the extended organization have been tentatively prepared.

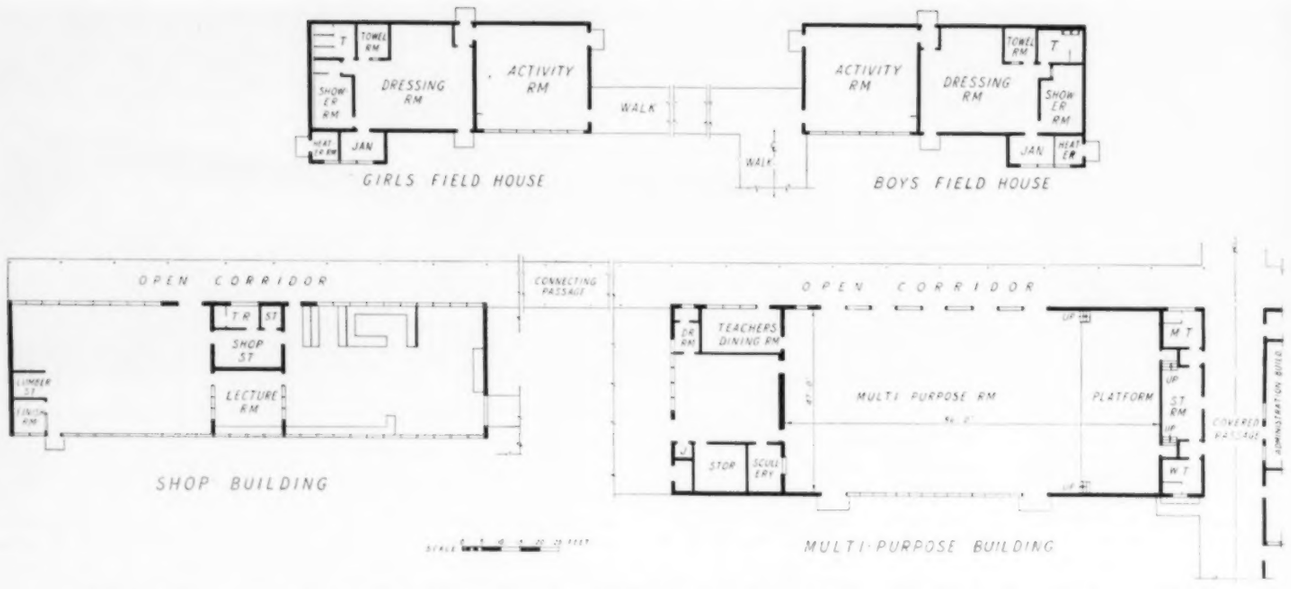
Riverside has a relatively mild climate and the cost of the land on which the building is being erected is such that it has been possible to make the plan of the double finger type. All corridors and locker areas are exposed, except for roofs. The arrangement will assure a minimum amount of interference with future classroom construction.

Although the building is outside the city fire district, it has been designed with maximum fire protection in mind. The construction is of reinforced brick, with expanded metal joists, and space for insulated roofs. The brick is exposed and painted on both inside and outside. The ceilings of the rooms are made of blown-on asbestos, providing a satisfactory acoustical condition as well as fire protection.

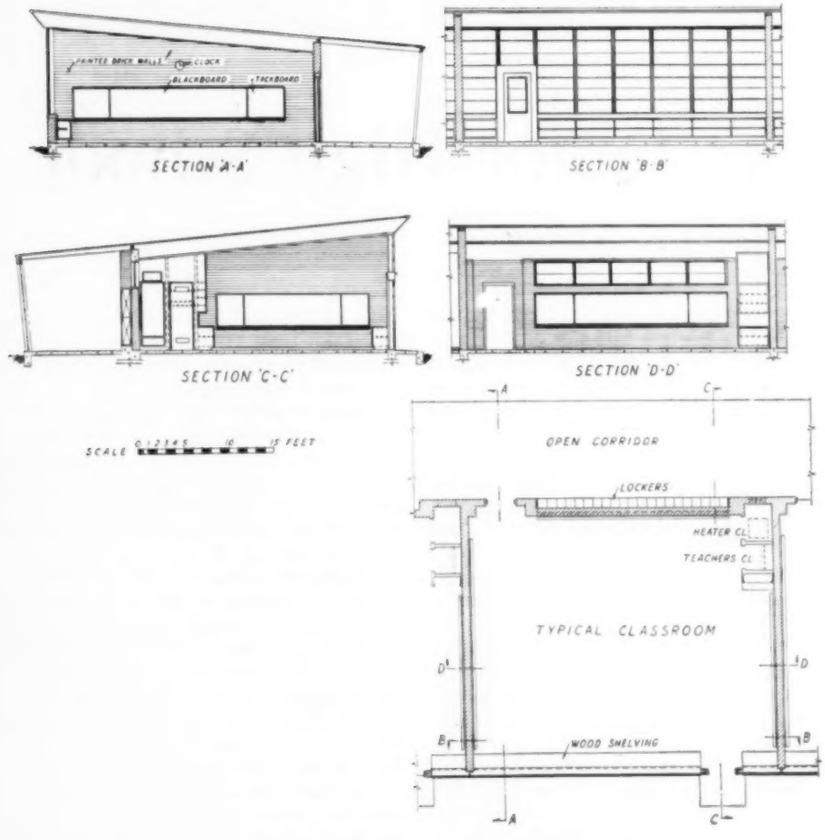
Heat, which is needed only for a relatively few days in the year, is provided by individual room gas furnaces. The ceilings are vented and the warm air from the furnaces is circulated by fans, with individual room controls. The shower and dressing rooms have radiant floor heating, with thermostatic control.

The floors throughout the building are of concrete, covered with asphalt tile, except in the shower and dressing rooms and toilets where ceramic tile and nonslip concrete are used.

*Business Assistant, Riverside City Schools, Riverside, Calif.



Typical Units, Jurupa Junior High School, Riverside, California. — Earl Heitschmidt and Charles O. Matcham, Architects. (Herman O. Ruhnau, Manager, Riverside, California, Office)



Typical Academic Classroom, Jurupa Junior High School, Riverside, California.

The initial portions of the building under construction include 11 academic classrooms, a clothing laboratory, a foods laboratory, a general farmshop, a woodworking shop, a large multipurpose room equipped for orchestra and band as well as for choral music, a cafeteria-dining room sufficiently large for school assemblies, dressing rooms, and toilets for both boys and girls.

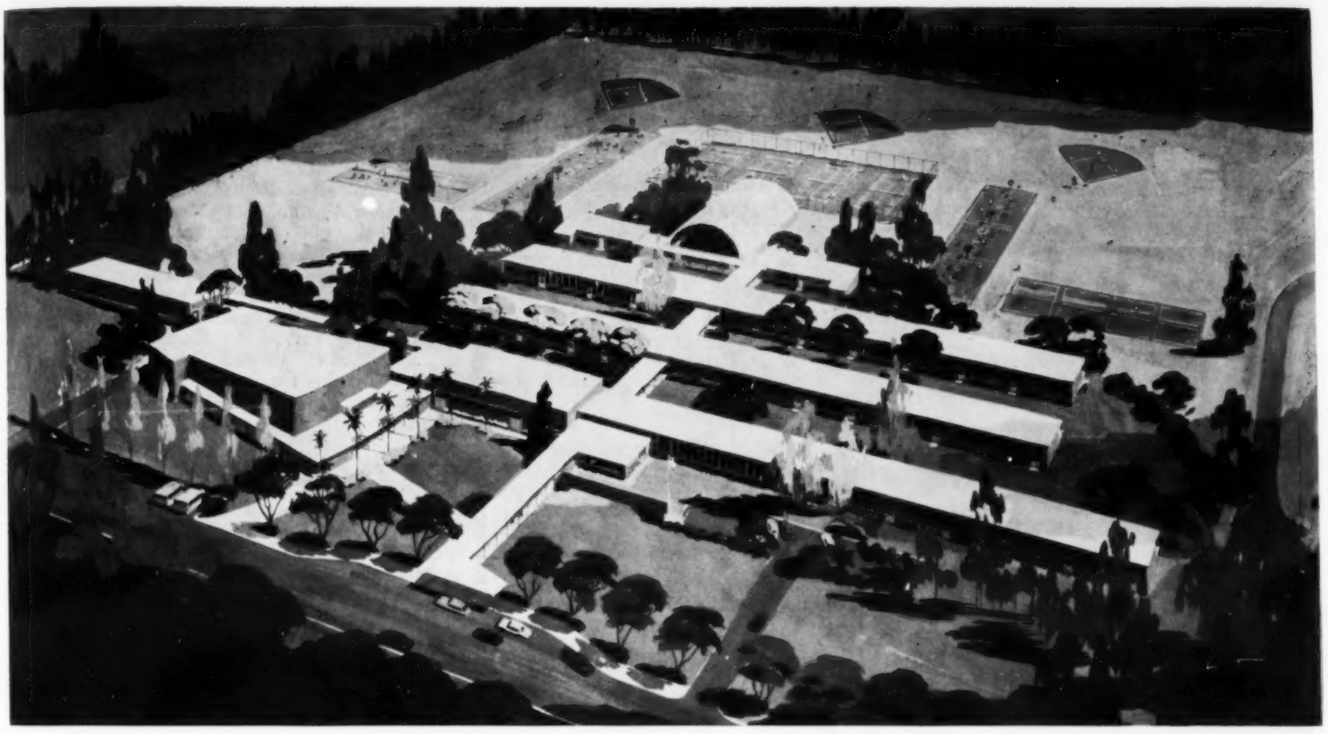
The shower rooms for boys and girls are especially planned for the administrative controls found successful in the Riverside high schools.

The layout of the administrative offices is particularly complete and has taken into account the possibility of expanding the school to a four-year junior high school or a six-year high school.

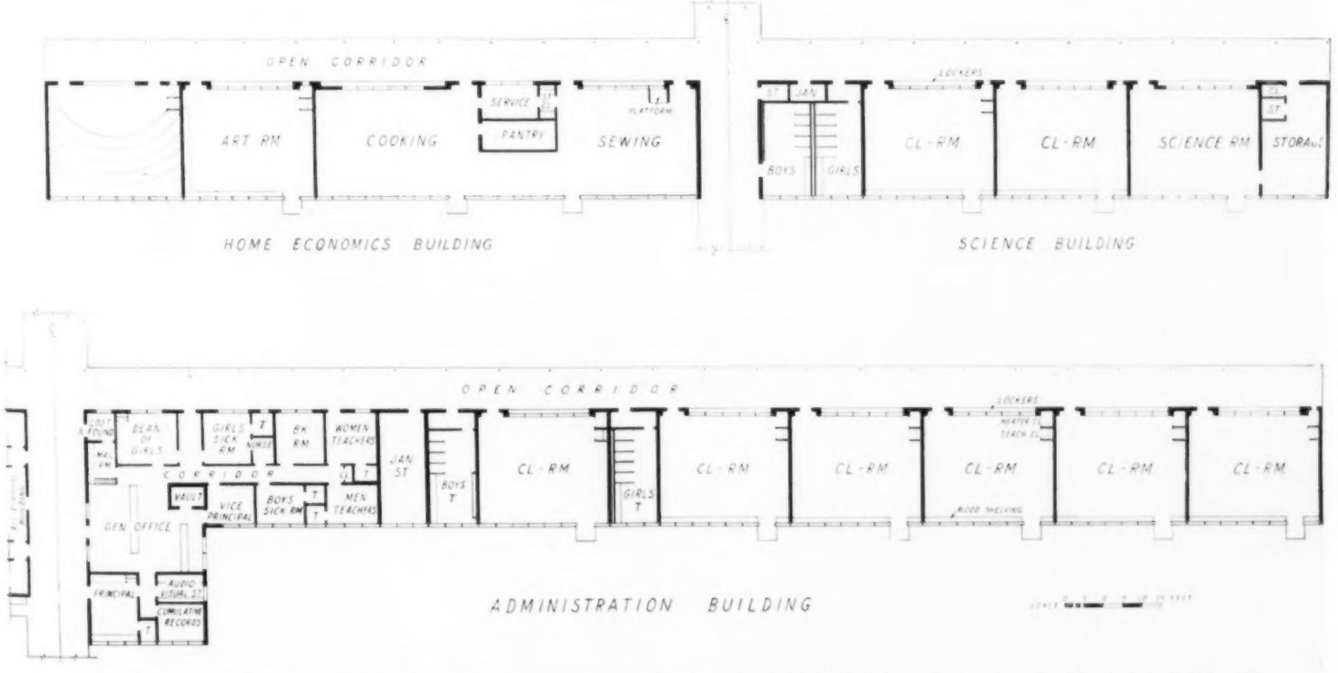
The Riverside city schools have had satisfactory experience within the last year in four major jobs in the use of reinforced brick construction as applied to one-story buildings of the above type of layout. This experience shows that the cost approaches the low-cost frame-and-stucco construction and is about $4 per square foot cheaper than reinforced concrete. The Jurupa School will cost between $9 and $10 per square foot.

SCHOOL STAFFED WITH MEN

The high school at Salida, Colo., now has 2 full-time women teachers out of a staff of 15 teachers; all other members are of the male persuasion. Only the homemaking and English teachers are women. A part-time lady librarian is employed, but the commercial, art, music, science, foreign language, history, social science, and shop teachers are men. In the junior high school, three out of five teachers are men, as are the principals and supervisors. Women are predominant in the two elementary schools, according to Supt. L. A. Barrett.



Air View of proposed complete Jurupa Junior High School, Riverside, California.— Earl Heitschmidt and Charles O. Matcham, Architects.
(Herman O. Ruhnau, Manager, Riverside, California, Office)



Typical Units, Jurupa Junior High School, Riverside, California. — Earl Heitschmidt and Charles O. Matcham, Architects.
(Herman O. Ruhnau, Manager, Riverside, California, Office)

IT'S LIKE SUN HEAT

*Paul Corey**

Cloudy or bright, the children in the new classroom at Dunbar Union School, in the Valley of the Moon, California, get sun type heat every day. Nine radiant glass heat panels, controlled by three thermostats, keep this 1000 square feet of classroom space at an even mellow temperature.

In five minutes after the panels are turned on they reach their full temperature of 300 degrees and the children feel warm. It is like standing in a sheltered spot in full sunlight on a cold day — although the air may feel cold, the rays of the sun striking the body warms it. That is radiant heat. That is the type of heat these glass panels give off. After they have been on a few hours, of course, the air in the classroom is heated also.

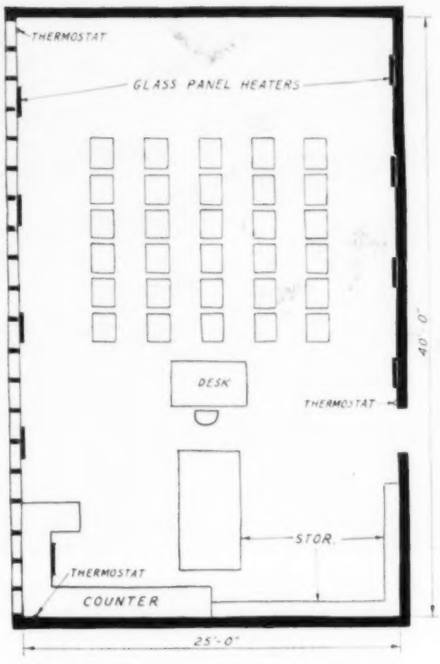
Last summer the board of trustees of the Dunbar Union School planned to add a new classroom and they had to choose between heating it with oil, an oil space heater, or with electricity. The five classrooms and the cafeteria were heated with oil heaters. But the heat in four of these five rooms was augmented by electric wall heaters of the convection type.

The contemplated room was to be a duplicate in size and construction of the fifth and newest of the rooms. This fifth room was heated entirely by a large oil space heater.

The trustees were aware of the inadequacy of this method of heating. Areas far from the heater were cold, while space near the heater was uncomfortably hot. Combustion of the oil in the stove used up the oxygen in the air. They also recognized the fire danger and damage done by oil fumes upon furniture and walls.

However, to heat with convection type electric heaters would be little different from oil heating. The new classroom would require two five-kilowatt heaters. This would divide the origin of heat but the areas farthest from these heaters would be cold and the areas close to them overheated.

*Sonoma, Calif.



Floor Plan of new classroom showing location of glass panel heaters.

When the trustees considered the possibility of installing radiant electric heat cables in the floor slab of the new room, they discovered that the cost would exceed the budget allotment. They decided to try the cheaper-to install, radiant glass heating panels.

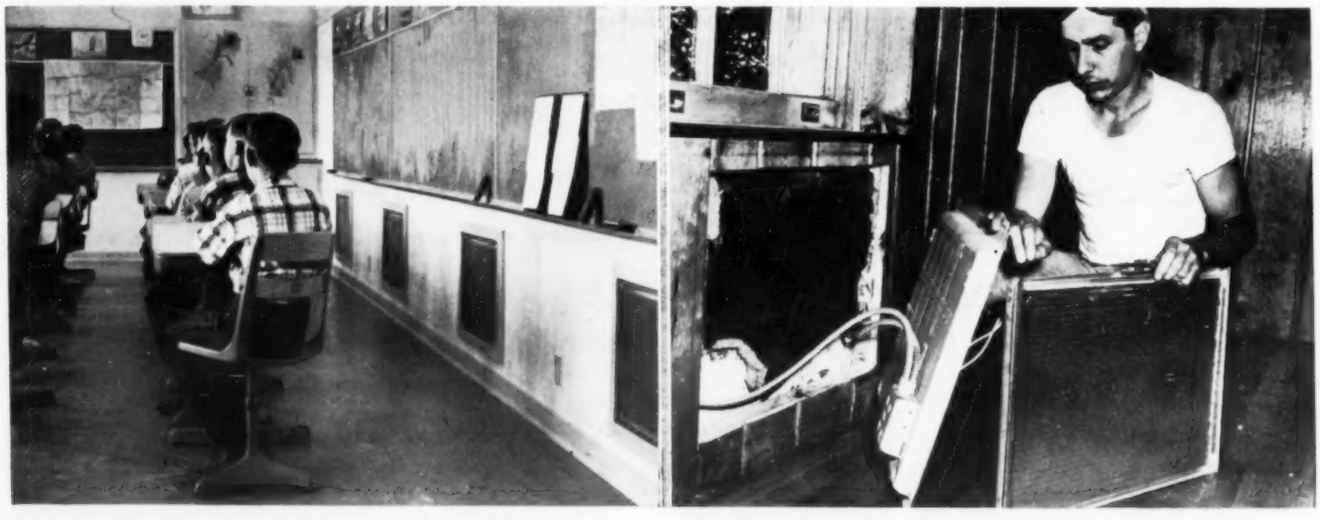
What are radiant glass heating panels? The French Maginot Line didn't stop the Germans in 1940, but to heat those vast underground corridors in the fortifications, the Saint Gobain Glass Company developed a radiant glass panel, giving off infrared rays, which is the same as sun heat minus the burning rays. Since the war, an American manufacturer has developed these panels for general heating use.

No radiant heating system is completely radiant. However, the heat from the panels is claimed to be 75 per cent radiant, which is 5 per cent more than that claimed for other radiant heating systems. Each panel consists of ¼ inch thick sheet of tempered glass 16 by 24 inches mounted on an aluminum reflector set in a steel pan frame. The heating element is an aluminum alloy baked onto the back of the glass panels, and each unit is rated at one kilowatt. One panel will heat to comfort 1000 to 1500 cubic feet of room space, depending upon climate and room construction, windows, insulation, etc.

In Dunbar temperatures for the winter months of December, January, and February drop to the low twenties. The new classroom, insulated in ceiling and walls, has practically one wall, a north wall, of glass. It was decided that nine panels, requiring nine kilowatts of power, would be sufficient to heat the room. These were spaced five beneath the big window wall and four along the opposite wall. They were controlled by three thermostats.

For the first month after installation the heaters were kept on all the time to dry out the room. No accurate check on operation could be made until after the first of the year.

Although the cost of installing radiant glass panels is less than electric or hot water radiant heat in the floor slab, it is higher than space heaters. The panels cost $55 each and the thermostats approximately



Left: interior wall of classroom, Dunbar Union School, showing radiant glass panel heaters. Right: a radiant glass panel dismantled.

Left: new classroom, Dunbar Union School, Valley of the Moon, California, showing window side with radiant glass heaters. Right: exterior of new classroom showing receding bank of windows.

$12 each. Then there is the wire, switches, and labor, which amounts to between $200 and $300.

Cost of operation depends largely upon the kilowatt rate. The manufacturers maintain that where power goes to two cents a kilowatt hour or below, the panels will compete with other methods of heating except natural gas.

At the Dunbar Union School, the electric power rate goes down to one cent per kilowatt hour. The panel heaters were turned on at 7:30 a.m. and turned off at 4:30 p.m. For a 30 school day period beginning the first of February, the panels used 46 kilowatts a day, and cost 46 cents a day to operate.

For the 173 day school year of 1948–49 the oil bill at 14 cents a gallon amounted to $509.68. This covered the oil consumed by six oil heaters, or an average of 49 cents a day for each heater for the 173 day period. However, heat for the school is not used more than half of this period. This means that the cost for heating with oil is more than twice what it is with electric glass panels.

In addition to this saving in operation cost, there is no upkeep cost. The panels are unbreakable under normal conditions of usage.

The glass panels at 300 degrees will not set fire to fabrics and they can be brushed against and even touched without serious harm if the contact isn't held. Wire guards are available to keep young children from touching the panels. Children sitting at their desks within two feet of the panels don't find them uncomfortably hot.

There was no way of checking the health factor in the glass panel heat. For accuracy, greater control of the lives of the children would be necessary, which was not possible. However, the heat from these panels is created by infrared rays. If sufferers from colds and sinusitis get relief with infrared treatments, then this heat should be a bonus in a schoolroom.

The only complaint against the heaters came the first day the room was occupied. The children complained that it was too hot.

When the teacher checked the thermostats, she found them set at 68 and the thermometers in the room registered just a little over that figure. The thermostat setting had to be reduced to almost 60 before comfort was achieved.

It was the teacher who solved this difficulty. She remembered that in the temporary classroom from which the children came, it was impossible to get the temperature to normal room temperature. It took several days for the children to get acclimated to their new room.

There is still disagreement in the district as to the practicality of heating with radiant glass panels because of the cost of installation. However, the trustees and Maxwell Cunningham, the school principal, the teacher and the children are in unanimous agreement on the heat: it is wonderful.

COMPLETE RENOVATION OF SCHOOLS IN SAN ANGELO, TEXAS

A rather extensive building program has been carried out in San Angelo, Tex., which included the renovation of the Thomas A. Edison Junior High School, and minor improvements to the existing school buildings. The Edison School, completed at a cost of $140,000, was the last project in a $1,250,000 bond issue voted in 1946 for building improvements. While the citizens must face the possibility of another bond issue to bring school facilities up to standard, they can look back upon the work completed with great satisfaction because it has brought the school system a long way toward modernization of the entire physical plant.

All of the 12 old buildings of the system have undergone thorough painting and repair jobs. The painting program was planned for improved lighting, conservation of eyesight, and more pleasant atmospheres for the classrooms.

A six classroom wing was added to the Edison School in 1947. The renovation program included the placing of ceramic wall tile in the hallways, replacing of hallway floors with terrazzo, installation of new colored asphalt-tile floors, and the enlarging of library and homemaking facilities. All classrooms are finished in pastel colors; new acoustic ceilings have been installed, and shower facilities provided for boys and girls. The old wing will eventually be remodeled for an auditorium.

A new wing of four rooms and a library was added to the Santa Rita Elementary School, and six rooms and a library at the Stephen F. Austin School. All of the classrooms are of the modern type, and the architect has made use of pastel colors, glass brick, and steel casement windows.

The High School Annex, formerly a part of the Junior College, has been repaired and painted for the use of the music department, the vocational agriculture classes, and the classes for handicapped children. It contains the offices of the directors of visual education and health and physical education. The distributive education, the trade and industries departments and the music suite are also housed there.

The major expenditure of the bond issue was used for the construction of the Robert Lee Junior High School, which was completed at a cost of $598,280. This school, modern in every respect, has terrazzo floors, tiled lobby walls, and colored tile wainscoting and window sills in all classrooms. Library and homemaking facilities, and shower rooms for boys and girls are provided.

A unique feature are the concrete paved play areas provided for the elementary schools and for the Edison and Senior High Schools. The slabs are designed for basketball, volleyball, badminton, and tennis games. The play areas are used during school hours and are used by neighborhood children after school hours. — *William Eilers.*

► The board of education of Wilmington, Del., has begun an extensive school building program for the year 1950–51, calling for 20 additional classrooms for three elementary buildings, at a total cost of $550,000. The program is being financed with a state appropriation of $330,000 and a local appropriation of $220,000 in the form of a bond issue. An additional project is the conversion of basement space in the high school into an industrial arts department, at an estimated cost of $8,500.

The American School Board Journal
William C. Bruce, *Editor*

CITY SCHOOL FINANCES

THROUGH a coincidence a new college text on city and county government and extracts from an address by President Horace A. Hildreth, of Bucknell College, have reached the JOURNAL editorial office on the same day. Both address and book include discussions of city school financing. They agree in arguing that city schools are a part of the local municipal government, that their financing should be in the hands of the over-all city taxing authority, and that the amount of the actual funds received for the schools must be adjusted on the basis of the relative needs of all city services. These expressions are in harmony with the theory of political scientists that the local "taxing power of government should not be broken into small departments each having the power to tax without relation to other departments." Similar views can be found frequently in the technical periodicals devoted to municipal government and taxation.

It is interesting that these notions prevail in contradiction to the basic laws of the states and the repeated interpretations of the courts which hold that the schools are not municipal departments, that the school boards are not local corporate bodies, but that the schools, and consequently also the school boards, are local agencies of the state.

The contention that minor agencies of local governmental units should not be given independent taxing power, but that they should depend on one unifying authority has merit. It cannot be said, however, that experience proves its soundness as applied to the schools. As far back as 1922, Frasier found that the school boards which are independent do not spend more, or in cases as much, as do the school boards which are wholly under the domination of the municipal administrations. The situation has not changed in the intervening years.

The local taxing independence of the schools has the value that it recognizes the fact that education is truly a state responsibility, which cannot be made subject to the uncertainties of local political situations. For greatest efficiency and for total morale the schools must be assured of the steady, certain, and ample financial support which the state laws alone can provide. In situations where the schools become subject to group interests or to the ambitions of mayors and departmental officeholders, it is the community which suffers because the children are directly harmed. The school boards and the teaching staffs do their best work when they have independence of action under state laws.

TEACHER TENURE AND THE COURTS

THE most recent NEA compilations of legal decisions affecting the tenure of teachers and their dismissal makes it clear that the courts are slowly, but certainly, going beyond the letter of the law, and in their findings are taking into account such elements as the efficiency of the teacher involved in a case, and the good will or malice of the dismissing board of education. The fact that during the past year only 24 cases of teachers' dismissals reached the courts is strong evidence that an infinitesimally small percentage of all instructors are subject to dismissal. There is evidence too that practically no teacher is released from her position because of politics or other unfair attitude on the part of the school board.

As in the past, the competent teacher who does his work efficiently and who is socially, and as a citizen, a competent person, need have no fear concerning his job or his permanence in office. In a number of states, the court has so strongly taken the position of teachers that there has been some reason for the humorous comment that a man may be divorced from three wives in less time than it takes to dismiss an incompetent teacher.

IMPROVING THE PROPERTY TAX

A RECENT issue of *Tax Policy* includes statements from tax officials in California, Colorado, Illinois, Iowa, Kentucky, Minnesota, Nebraska, Nevada, Oregon, and Pennsylvania outlining important progress made in the legal methods of appraising property and equalizing appraisals for tax purposes. The statements are impressive evidence that in these states the importance of the property tax has been recognized to the point that genuine efficiency may be expected in the assessment and collection of taxes levied against real property.

If the improvements in these states are added to a list of other states that have developed more adequate appraisal and tax-levying methods during the past two decades, there is reason for confidence in the renewed efficacy of this original means of raising funds for governmental purposes.

The schools are vitally interested in this progress because education in every state is supported chiefly by the property tax. Perhaps the newest improvements in the eight states named could be extended to all states, if the respective school board associations would take up the problem and, with the co-operation of the state teachers' associations, insist on efficiency in this important field.

THE WAR AND EDUCATION

THE setbacks we are suffering in the Korean War and the threat of all-out hostilities with Russia provide new causes of worry for all in charge of American education.

On the economic side, it is clear that there will be renewed pressure to ease school taxation and to prevent the increase in local and state school taxes. The Federal Government will take such vastly higher sums from the taxpayers that the present tax imbalance will be made still worse. Inflationary price increases are already under way to such an extent that our economy is seriously threatened. School boards will be embarrassed again to meet the higher salaries that industry can offer and to find moneys to pay for the materials entering into the operation of the schools and school plants.

We are years behind necessary enlargement and modernization of the school plant due to stoppage of construction from 1940 to 1946, the widening of the school program, and the influx of children born during and after World War II. If, as appears certain, school construction will be hampered sharply by restrictions on the use of steel and other materials, difficulties in financing, and the diversion of man power from the building trades to the war industries, we can foresee nothing but catastrophe in the growing shortage of class accommodations needed during the next decade.

More important than these material problems which the school boards will have to face, will be a disarrangement in the schools through the loss of teachers, the shifts in population to war production centers, and the demand of military and civilian demands on the schools for various home-front services. Unless something is done quickly to excuse teachers and student teachers from the draft, the present shortage of elementary instructors qualified to carry on the work of the schools will be worse than it was in 1940–48 and will be extended upward into the high schools and the colleges. The suggestion that teachers be frozen in their jobs may be extreme but it deserves to be considered

as a final measure that may save the needed continuity of school services.

The only encouraging element in the present serious situation is the fact that there is a great body of recent experience available for the school boards and their state and local executives, upon which to develop new policies and procedures as emergencies arise. We know the strong and the weak points of the Lanham Act, of the training programs for warworkers, of the high school programs, and of the air raid and other defense measures. The recent meeting of state school executives with independent educational agencies in Washington is evidence that the machinery is at work which will enable the schools to do their share in winning an all-out war. God forbid that it should come.

DISPOSAL OF OLD BUILDINGS

ALL the large cities and increasing numbers of small towns have school buildings which have been or should be abandoned because of obsolescence or disuse. An inquiry into the problem of disposing of these old plants, carried on by the *School Business Affairs*, indicates that a wide variety of policies has been followed by boards of education. Depending upon local conditions and the state of the buildings themselves, the structures have been sold for commercial or private school use; they have been converted into apartments; other governmental agencies have taken them over for office or warehousing use. Most frequently the structures have been razed and the plots have been sold.

The disposal of old buildings is attended with difficulties growing out of emotional attachments of "old grads," or out of the desire of individuals to pick up a "bargain." The taxpayer also enters the picture.

The job of disposing of old schools deserves to be attacked with vigor, caution, and above all reasonable dispatch. No neighborhood should have an abandoned building imposed on it as an eyesore which is a standing invitation to vandalism and a hindrance to the economic betterment of the adjoining property. School property which stands idle causes a loss in taxes and of income on the investment.

It may be questioned whether school boards have a right to hold abandoned school properties as investments for rental income. Such holdings seem to be legally and logically limited to property acquired through federal or state grant, or gift, for permanent school fund purposes. Each abandoned school should be considered from the standpoint of social and civic benefits to be obtained, and then the economic effects of holding or sale determined.

"All Aboard"—

Clear Understanding of Policy-Making and Administrative Relationships Promotes Effective Public Schools

Edward M. Tuttle

Effective working relationships between boards of education and the superintendents who are their administrators depend in large measure upon mutual agreement as to where the lines shall be drawn between the making of policies and the administration of those policies. In general, policy-making is the function of the board and putting policy into operation is the function of the superintendent. But it is not always easy to distinguish between the two functions and there is inevitable overlapping at many points.

Recently, at a conference for administrative officers, sponsored jointly by the University of Chicago and Northwestern University, a group of some fifty superintendents, board members, and other leaders spent several sessions discussing this question of the distinction between policy and administration. They were able to arrive at certain conclusions to which all agreed, and which are set forth below in the hope that they may be helpful to others.

The Goal Is the Children

Over and over again in the course of the discussion it was emphasized that the key to all our efforts should be the children in the school, their best interests and greatest possible development. In other words, both the formulation of educational policies and their administration in practice should be tested at all points by their contribution to the children in the school. That is the only reason or excuse for having them.

Working Definitions

It took most of the first session to agree upon some definitions which should guide the thinking to follow. Three of these are fundamental:

1. *Policies* are principles adopted by a board of education to chart a course of action for its administrator and to define the limits within which he shall exercise judgment and discretion. They are a guide as to *the what, the why*, and *the how much* of desired educational practice.

2. *Rules and Regulations*, as distinguished from policies, are the detailed directions necessary to put policies into effect. They are more likely to be formulated by the administrator with the informal approval of the board than to be initiated or formally acted upon by the board itself. They provide a blueprint as to *the how, the who, the when*, and *the where* of actual educational practice.

3. *Procedures* are a set of working rules for the board itself as regards its organization, meetings, parliamentary practice, order of business, minutes, and the like. Little time was spent discussing these except to recognize that a board should have established procedures, preferably set down on record, and should not conduct its business in hit or miss fashion.

Overlapping

As indicated in the beginning, the group felt that there will always be some inevitable overlapping between policies on the one hand and rules and regulations on the other — between the functions of the board and those of the administrator. It was brought out that the analogy sometimes made to the legislative and the executive branches of government is only partially true in connection with school board-administrator relationships. There is no clear-cut separation, and every degree of overlapping exists depending on the personalities involved and the local conditions.

The discussion did lead to one very interesting conclusion which might almost be regarded as axiomatic. It may be stated thus: the degree of detail set forth in a policy adopted by a board is likely to vary in inverse ratio to the degree of confidence existing between the board and the superintendent. In other words, the greater the confidence the less rigid the prescription, and vice versa.

How Policies Are Evolved

Having established some working definitions and recognizing their interrelationships, the discussion group proceeded to try to discover how policies are or should be evolved. Agreement was quickly reached as to the ideal method, as follows: every policy should be arrived at after a process of discussion and deliberation involving representatives of all groups which will be affected by the application of the policy.

At this point the group became involved in a discussion of public relations and the role of citizen committees or advisory groups in helping a board of education to arrive at policies which will reflect the desires of the community in regard to its schools and will also take into account the operations and responsibilities of the professional staff. Reference was made to a number of statements of policy by boards of education which had been arrived at by a truly cooperative and democratic process.

Many things came out in the discussion of how policies originate. For example, it was emphasized that the motive behind a policy is of tremendous importance. A poor type of policy results from a defensive,

"All Aboard"

preventive, or corrective intent. Such a policy is inward looking and restrictive. It results in establishing a status quo which is often only a fancy name for a rut. On the other hand, a good type of policy results from an approving, encouraging, constructive intent. Such a policy is outward looking and expansive. It leads to growth and progress. We need more policies of this type if education is to adapt itself promptly to the changing needs of the times.

It was agreed by the group that where relationships are right, a board seeks the assistance of the administrator in suggesting new policy or modifications of existing policy, and vice versa. One leader of long experience aptly observed that whenever any policy begins to operate automatically, like a "rule of thumb," it is time to consider its revision, for it has become static instead of dynamic.

The discussion revealed that, except in cases like the creation of a new unit district and a new board under some plan of reorganization, a school board rarely has an opportunity to make a wholly new set of policies. Rather it finds a body of policy already established as a result of cumulative action on specific cases, and embodied in the minutes of past board meetings. But these are always subject to evaluation and improvement and the best policies may be said to go through a continuous process of growth and maturing rather than to emerge full blown in fixed and final form. It is in this process of adaptation to current needs that all groups concerned may be given an opportunity to participate.

Published Policies

After deciding what policies are and how they develop, the conference group discussed the desirability of setting policies down in written form. It was agreed that policies should be reduced to writing and made available both to the public and to the profession. But it should be made clear that most policies are not unalterably fixed and rigid, and that they are subject to modification of their published form whenever current circumstances indicate that they are failing of their original intent.

But published policies often avoid misunderstandings, and also act as a restraint against impulsive or reversive action. Moreover, they are especially helpful to newly elected board members who need quickly to build a background of understanding for their job.

Attention was called to a comprehensive outline of what may go into a published code, which appeared in the May 12, 1950, issue of the *School Board News Bulletin* of the Illinois Association of School Boards.

Helping New Board Members

Reference to new board members led to some discussion of ways of helping them to become oriented. It was pointed out that no matter how much experience or judgment along other lines a board member brings to his job, his decisions on school policy must be based upon knowledge of the facts and an understanding of the educational situation and its potentialities. How is he to secure this knowledge?

Numerous suggestions were offered, including:

1. An opportunity to meet with the board once or twice as a guest in advance of his first official meeting.
2. An explanation by the president or some experienced member of the board, at every first meeting after new members are elected, of how the board operates and of the duties and responsibilities of board members.
3. A personal conference with the school administrator.
4. A day spent in the schools, with and without guidance.
5. Receipt of all pertinent printed materials, both local and general — minutes, policies, legal codes, pamphlets, books, etc.
6. Attendance at school board association meetings and workshops — county, regional, state, national.
7. The holding of joint meetings between board and administrative groups in which each has an opportunity to become acquainted with the other, its personnel and problems.

In Conclusion

It was agreed, finally, that if there are to be effective working relationships between a school board and its administrator in the interest of the children of the community there must be

1. Unity and harmony within the board itself. A factional fight of any kind puts the administrator between two fires and prevents him and his staff from rendering their best service.
2. A clear recognition of the functions of the board and of the administrator and of their co-operative overlappings.
3. Some written statement of policies, rules, and regulations subject to constant adjustment to current needs.
4. A process of continuous growth in understanding by the board, the professional staff, and the community, of educational affairs and opportunities both as to their local application and their state-wide and nationwide significance.
5. Most important of all, a genuine liking and respect on the part of the board and the superintendent each for the other. Both must reflect integrity, sincerity, and devotion to the goal of the best possible education of all the children of all the people.

Education and War

"It requires the labors of many years for a nation to regain the losses sustained by one year's war; especially in the morals of the people." — GEORGE DILLWYN.

In times of national emergency, the burden of responsibility upon universal education as a constructive force vastly increases. Education then has not only to continue the steady building of a worthy citizenry, but it has in addition to counteract the demoralizing effects incident to the sudden and feverish interruption of the normal pattern of life. Wars and preparations for war, no matter how altruistic their motives or how necessary their undertaking, inevitably result in tremendous losses for all who are involved. Instruments of destruction, they consume the lives, the wealth, the material resources, and the moral stability of their participants. With such a situation again confronting America in the interest of ultimate security and peace in the world, school boards and school administrators face an unparalleled challenge to provide and maintain effective means for regaining any lost ground in the intellectual, moral, and spiritual development of our people, young and old. — *E.M.T.*

Education in the National Emergency

The executive secretary of the National School Boards Association has recently pointed out that, rapid as has been the growth of the school boards association movement in the past year or more, progress must be speeded up to meet the coming emergency.

It is urged that no state association assemble in annual convention during 1950–51 and adjourn before making certain that it has laid the foundations for effective organization, finance, membership, and program of activity.

The situation in American public education, already serious, is entering a new and more critical phase. Our country is returning to a war economy before we have corrected the deficiencies occasioned by the last war.

Thousands of local school boards which have gradually been bringing themselves and their communities to the point of action as regards needed school buildings and equipment, increased financial support, and an adequate supply of competent teachers and administrators, are suddenly going to find that the plans they have made will be difficult or even impossible of accomplishment.

But school boards are legally responsible for the education of America's children in a manner adequate to America's need. They must find answers to their problems in spite of difficulties.

It is obvious that separate, scattered efforts on the part of local boards cannot be so effective as co-operative planning and concerted action. Now more than ever we must discover that "in association there is strength" — strength for each and strength for all. That is the fundamental reason for rapidly building up our state and national associations of school boards to the point where their services will be prompt and effective and their voices will carry weight in educational policy-making.

The situation calls for heroic action, for the subordination of personal preferences to the common good, for the self-dedication of every school board member to work untiringly with his fellow board members throughout America to maintain public education as the constructive instrument of our democracy.

The National School Boards Association is co-operating with other organizations repre-

(Concluded on page 56)

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"All Aboard"

(Concluded from page 54)

senting every level of American education to determine (1) how the strength of education can best be utilized in the national interest, (2) how the interests and needs of education must be protected during the period of emergency, and (3) what machinery needs to be set up to maintain close and orderly relations between the Federal government and America's schools and colleges.

New York Secretary Honored

Everett R. Dyer, executive secretary of the New York State School Boards Association, Inc., has been appointed recently by Governor Dewey to serve as a member of the New York State School Buildings Commission created by an act of the 1950 State Legislature. This commission is authorized to make a comprehensive study of the needs for school buildings in the state and of methods of financing the costs of an adequate building program. The first meeting of the commission, under the chairmanship of State Comptroller Frank C. Moore, was held in Albany, August 22–23.

The Importance of School Secretaries

Sometimes we do not realize that a vital connecting link between the school and the community is the school secretary. This person, usually a woman, is in a position to do more good or more harm to school-public relations than almost any individual in the system.

Superintendents who recognize the important function of the secretary claim that they sometimes have a very hard time convincing their boards of education that the secretary is anything more than a clerk to be employed at a subordinate salary. If this is true, we are making a mistake in not giving more serious consideration to this position.

School secretaries are organized into state and national associations. They are affiliated with the National Education Association and hold an annual meeting with the N.E.A., during the summer. This is followed by a week-long workshop at some university. The group met at Northwestern University a few weeks ago, 338 strong from 34 states, some of them with their salaries and expenses paid by their boards, many of them using their own time and money to better qualify themselves for their jobs.

It is suggested that state school boards associations would do well to recognize the existence and efforts of State Associations of School Secretaries and co-operate with them on annual meeting programs and the like. Their national president for the next two years is Miss Edna Atkinson, Oak Park-River Forest High School, Oak Park, Ill.

"Scouting in Rural Schools"

Recently an attractive little pamphlet under the above title has been prepared jointly by the County and Rural Area Superintendents, Rural Service, National Education Association, and the National Committee on Scouting in the Schools and Rural Service of the Boy Scouts of America.

The stated purpose of the pamphlet is "to show schools (meaning school boards and school staffs) and P.T.A.'s (meaning parents and the general public) how scouting helps boys in the open country and in rural towns and villages of populations under 2500, and how it helps them to organize scout units for these boys."

Topics covered briefly and convincingly are the value of scouting to rural boys and to rural education, citizenship training through scouting, the world brotherhood of scouting, scouting programs in rural grade schools and high schools, the ideals of the movement, co-operation with 4-H and F.F.A., how to organize, leadership and leader training, sources of help, including literature helps, and action by rural educators. The pamphlet is published and distributed by the Boy Scouts of America, 2 Park Avenue, New York 16, N. Y. County and rural boards of education might well co-operate in spreading information concerning this worthy movement.

N.S.B.A. Convention Notes

Bear in mind that the 1951 Convention of the National School Boards Association will be held at Haddon Hall Hotel, in Atlantic City, on Friday and Saturday, February 16–17. It will be followed by the big meeting of the American Association of School Administrators, at the Atlantic City Auditorium, February 17–22.

Board members planning to make the trip to Atlantic City this winter should go early enough to participate in the N.S.B.A. meeting and stay over for several days of the A.A.S.A. meeting. Some joint sessions between the two groups will be of particular interest. Watch these columns in the months to come for information regarding the programs.

It is important that both your State School Boards Association and the National Association know in advance the names and addresses of board members who will be in Atlantic City, either on their own initiative or with their superintendents. Please make it a point to supply this information as soon as you decide that you are going. The address of national headquarters is 450 East Ohio St., Chicago 11, Ill.

SCHOOL BOARD CONVENTIONS

October 1–4. **California School Trustees Association at San Diego, Calif. Secretary, Mrs. I. E. Porter, 4 Professional Building, Bakersfield, Calif. Attendance, 500.**

October 16–19. **National Council on Schoolhouse Construction,** at Miami Beach, Fla. Headquarters, Sherry-Frontenac Hotel. Secretary, W. D. McClurkin, George Peabody College for Teachers, Nashville, Tenn.

October 19–20. **Iowa Association of School Boards, at Des Moines, Iowa. Secretary, Don A. Foster, 401 Shops Bldg., Des Moines. Exhibits, Mr. Foster. Attendance, 1200.**

October 22–24. **New York State School Boards Association, Inc., at Syracuse, N. Y. Headquarters, Hotel Syracuse. Executive secretary, Everett R. Dyer, 9 S. Third Ave., Mt. Vernon, N. Y. Exhibits, Mr. Dyer. Attendance, 2000.**

October 23–25. **Montana School Boards Association, at Missoula. Headquarters, Florence Hotel. Secretary, J. L. Gleason, Sr., Box 669, Livingston. Attendance, 600.**

October 25. **Vermont State School Officers' Association,** at Montpelier. Headquarters, State House. Secretary, Mrs. H. Belmont Houghton, 6 Richardson St., Montpelier. Attendance, 200.

ALBANY VOTES CONFIDENCE IN BOARD

The people of Albany, Oregon, went to the polls in June in the heaviest vote recorded in the city to re-elect Orville Wiseman, a member of the school board, and to reaffirm their confidence in the school building program which the board has under way. In ten years, the school population has increased more than 100 per cent and the board is anticipating still further growth.

Members of the board (left to right) are: Chairman Ralph Banton, Orville Wiseman, Ben Pharis, Supt. I. R. Halseth, Clerk L. A. White, James K. Weatherford, Jr., and George Nissen.

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CITY SCHOOL SYSTEMS, 1947–48

During the school year 1947–48 the 3202 city school systems in the United States, according to a June release of the U. S. Office of Education, had an average enrollment of 3807 children and an average daily attendance of 3265 pupils. These school systems had an average of 1.6 supervisors, 5.8 principals, 28 men teachers, and 103 women teachers. On the average, each teacher had a class of 29.1 children, of whom 25 were daily in attendance.

The average number of school days for the year was 181.6 days. The total current expenditure for the school year was $198.13 per pupil. The capital outlay per pupil in average daily attendance was 19.71 and each of the school districts had on the average an outstanding debt of $132.32 per pupil in average daily attendance.

During the school year the ratio of teachers to supervisors was 82 to 1, as compared with 91 to 1 in 1939–40.

The city school systems in 1948 spent $2,071 million for current expenditures. Of this amount, administration or general control consumed 3.8 per cent; instruction took 73.1 per cent; plant operation 10.6 per cent; plant maintenance 4.8 per cent; and fixed charges 3.8 per cent.

The average salaries of teachers and other members of the instructional staff, exclusive of supervisors and principals, was $3,116. These salaries amounted to 63.0 per cent of the total current expenditures.

Among the city school systems, the highest total current outlay per pupil in A.D.A. was $236.50 in the Middle Atlantic States, and the lowest was $117.02 in the East South-central States.

Throughout the country, the 1947–48 enrollment represented a large increase during the previous eight-year period, except in the very largest cities where there was a decrease.

A GOOD SUPERVISORY PROGRAM

The underlying principles of school supervision are frequently misunderstood by members of boards of education who feel that the superintendent and his associates should apply some of the methods which they use as executives in their business or as parents in their families. Too often, these supervisory attitudes in business and in the home have elements of dictatorship and are lacking in democratic outlook.

The constructive aspects of supervision rather than the merely inspectorial and critical aspects have in recent years assumed major prominence in the thinking and action of competent school executives. In this connection, Dr. Frank Graves Dickey, of the University of Kentucky, suggests nine points for a constructive program which are worth consideration not only by school boards but also by their professional executives.

1. A good supervisory program is not so much a supervisory function in which teachers participate as a teacher function in which the supervisor participates. Training or self-development is for all, not merely for teachers.

2. A good supervisory program should be a coordinating and unifying force in a school or school system. Supervision must offset compartmentalization and should stimulate co-operative interest and enthusiasm.

3. A good supervisory program promotes an increasing emphasis upon the relationship of the school to a changing society. Wholesome community relationships should be developed.

4. A good supervisory program should emphasize the fact that there is no recipe for so-called successful teaching. Although the same general, over-all instructional policies should prevail within a school system, a good supervisory program allows the individual teacher and the individual school large freedom of action. The individual school and its staff should be the operational unit in program development.

5. A good supervisory program should be based upon democratic principles. The supervisory-administrative relationships and policies should enable all personnel to work together happily and effectively.

6. A good supervisory program should provide for continuous evaluation, since a continuous study of the process of instructional improvement is essential. Appraisals and evaluations of practices and techniques are an integral part of a good program of supervision.

7. A good supervisory program discovers and develops leadership. The entire program of supervision is dependent for its success upon democratic leadership.

8. A good supervisory program should place primary emphasis upon the worth and dignity of human personality. The variety and immensity of the problems of human relationships make it imperative that supervision be set up on a basis which takes into consideration each individual personality and the means by which each person may best learn and grow.

9. A good supervisory program maintains balance. A variety of techniques and procedures is used. There should always be an awareness of the needs of the program as a whole. — *Frank Graves Dickey.*

► During the school year 1950–51, pupils in the third, sixth, and ninth grades at Des Moines, Iowa, will have their hearing checked. The checks are to be made by the Special Education Division of the State Department of Education. Six audiometers will be used in making the hearing tests. During 1949–50 only about 50 per cent of the schools were reached, and 44,000 pupils screened.

HIGH SCHOOL TEACHERS RECEIVE EXTRA PAY FOR EXTRA WORK

The board of education at Tarrytown, N. Y., has revised its salary schedule to include extra pay for extra work done by high school teachers in carrying on extracurricular activities. The present salary schedule sets the minimum pay of teachers at $2,400, and the maximum at $4,600. Teachers with four years' training begin at $2,800. The absolute maximum is $5,000 for those with six years of professional education. The 1950–51 median salary of all teachers in service is $4,600.

Acting on a study carried on by a committee of teachers, members of the supervisory staff, and board of education members, the school board has adopted a plan of extra pay of $100 per year for coaches, and varying amounts of extra pay for teachers who do other work. If a coach is actively engaged during all of the three sport seasons, it is possible for him to receive $300 for his total work during the year. Extra pay of $100 per year is paid to the high school newspaper advisor, the yearbook-editorial advisor, and $100 to the intramural basketball instructor; $200 each to the stagecraft advisor, the dramatics advisor, the debating advisor, and the track-varsity coach; $250 to the high school G.O. treasurer, and $125 to the tennis coach.

It was agreed by the joint salary committee that an adjustment should be made in the case of each teacher performing duty in excess of the standard teaching day, which has been defined as consisting of a homeroom, five class periods, one study hall, and an average per day of one half hour of duty not directly related to the classroom.

Where possible, it was suggested that an adjustment be made through a lightening of the teaching load, to such an extent that the total duties performed by each teacher will closely conform to the required standard.

If it is not feasible to lighten the teaching load, it was suggested that each teacher performing duty in excess of the standard day be compensated by the payment of additional salary. In determining the units of extracurricular duties for a given activity, the estimated time is multiplied by 1.5 (except for coaching), where the time is multiplied by 1.75.

In determining whether a teacher's load is excessive, his units of extracurricular duties are computed, then his over-all schedule is compared with the standard. If he has one less teaching period daily, a deduction of 200 is made. If he has no study hall, a deduction of 150 is made.

LYND CRITICIZES SALARY SCHEDULES

A "flagrant case of false values" has arisen in the school system by rating a teachers' ability on the number of "units" she has, Albert Lynd, Sharon, Mass., school committee member told a group of high school teachers and the education committee of the League of Women Voters in Worcester, Mass.

"Any other method of evaluating teachers might jeopardize the flow of students to the summer schools," he declared. "The professors of education have a vested interest in maintaining a large stock of courses on hand." Mr. Lynd is author of the controversial article, "Quackery in the Schools," in a recent issue of the *Atlantic Monthly*.

Mr. Lynd said the best teacher in a school system can be the lowest paid, and the worst teacher the best paid under salary schedules in use in most places. "The professors of education have filled your schools and mine with procedures and objectives on which the community has not been consulted," he said. "In fields where members of the community have some knowledge of school activities they are not impressed."

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"Eliminating some of the many clerical duties expected of secondary school teachers by hiring clerks and leaving the teacher free to teach can increase efficiency. The principal who aims at small classes, with few subject preparations for his teachers, is fulfilling his responsibilities as a principal.

"Although a school is a set of buildings and a faculty, it is also a spiritual idea. It must impart to its students the basic truths of life. The biggest problem to combat presently is the extreme materialism rampant in the world. If all the teachers in the world taught that man's greatest happiness lies in doing for others, a future generation might find the peace we have sought vainly since World War II ended. Accomplishing this would transcend all other peaks of efficiency."

HENNEPIN SALARY SCHEDULE

The school board of Dist. No. 24, Hennepin County, Minn., has adopted a new salary schedule, based on 37 weeks of service and arranged according to experience and amount of professional training. Teachers with two years' training start at $2,150 and go to $3,600 in the eleventh year of service; those with three years' training begin at $2,250 and go to $3,700 in the eleventh year; those with four years' training start at $2,400 and go to $4,400 in the fourteenth year; those with five years' training begin at $2,600 and go to $4,600 in the fourteenth year.

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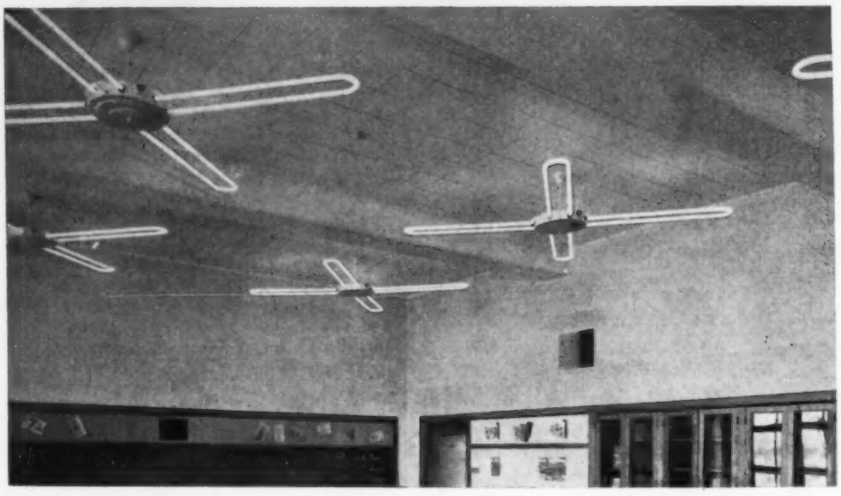

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● Records show that the life of a school building is about forty years. It does not necessarily follow that all of the equipment put into the school should also last forty years. It does follow, however, that the economics of lighting equipment should be figured on at least a ten-year period. This means that in addition to first cost, school administrators must add to this cost, the cost of electrical power consumed during the period, the cost of light-bulb replacement, plus the very important and high cost of maintenance.

● The Cold Cathode fixtures shown in the above illustration are in use in more than 1500 classrooms in the Detroit School system. They were selected not on the basis of first cost alone but also on their ability to provide good illumination with a minimum cost for maintenance and lamp replacement. Actual records show lamp replacements over a four-year period to be only 2.6%. Maintenance is kept at a minimum, as the low-brightness lamps do not require glare-shields in the form of eggcrate louvers or glass.

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training will receive $125 per year allowance for teaching experience in other schools. The salary level for beginning teachers with four years or more experience is: two-year training, $2,650; three-year training, $2,750; four-year training, $3,000; and five-year training, $3,200. Men are paid $300 per year above the schedule until they reach the maximum salary.

Teachers at the present maximum on two- or three-year preparation for 1949–50 schedule, will receive a $50 adjustment, plus an additional step payment of $100; teachers on a four-year preparation, will receive a $50 adjustment, plus an additional step payment of $150.

Teachers who do not possess a B.A. degree or equal must attend summer school once every three years until they receive a degree. A probationary period of three years is required before a regular appointment of a teacher.

HIAWATHA SALARY SCHEDULE

The school board of Hiawatha, Kans., has adopted a salary schedule, prepared under the direction of Supt. M. F. Stark. The schedule divides all teachers into six classes: Class I, with 60 to 80 college hours of credit, is required to take professional studies and to gain 8 hours additional credit every two years in order to continue receiving increments; Class II teachers include those with 90 to 104 college hours of credit; Class III includes teachers with 105 to 119 hours' college credit. These two groups must secure 8 hours additional acceptable credit every three years to be eligible for increments. Class IV includes teachers with a bachelor's degree or 120 to 134 hours' credit; Class V includes teachers with a degree, plus 15 hours' credit; Class VI includes teachers with a master's degree. Teachers in classes 4, 5, and 6 must secure at least 6 additional semester hours' credit each four years. After they reach the maximum in their groups they must maintain their professional status by attending workshops, conferences, travel, etc., acceptable to the board of education.

Teachers in Class 1 begin at $2,040 and go to $2,280 in the fifth year; those in Class 2 start at $2,160 and go to $2,460 in the sixth year; those in Class 3 begin at $2,280 and go to $2,640 in the seventh year; those in Class 4 begin at $2,400 and go to $2,940 in the tenth year; those in Class 5 start at $2,460 and go to $3,060 in the eleventh year; and those in Class 6 begin at $2,520 and go to $3,180 in the twelfth year. Men teachers receive $420 per year above the schedule. All new teachers are required to have a bachelor's degree.

A sick-leave policy is maintained, which provides four days per year for illness, which is cumulative up to twenty days. This with the four days of the current year makes a total possible of 24 days in one year.

ANNOUNCE TENTATIVE PROGRAM FOR ASBO MEETING

President Francis R. Scherer has announced the tentative program for the meeting of the Association of School Business Officials, to be held September 25–28, at Chicago, Ill. The headquarters will be at the Hotel Sherman where the registration of delegates will be handled.

The opening session on Monday morning, September 24, will be high-lighted by an address by Dr. William H. Alexander, of Oklahoma City. Tuesday morning will be a general session, with addresses by Miss Marian Telford, of the National Safety Council, and James K. McElroy, of the National Fire Protection Association. Wednesday morning will be devoted to a brief general session for the election of officers, followed by four sectional meetings. In the evening the annual banquet will take place, with Dr. Herold C. Hunt, of Chicago, as the speaker.

Thursday morning will be a general session, with three speakers, Paul J. Misner, of Glencoe, Ill., Beardsley Ruml, of the National Citizens Commission, and James M. Spinning, of Rochester, who will speak on the topic, "Peering Into the Future."

Seven sectional meetings will be held, each in charge of a chairman. Harold E. Akerly, Rochester, N. Y., is chairman of the meeting on accounting and finance; Frank C. Washam, Chicago, of the meeting on cafeterias; Graham R. Miller, Denver, Colo., of the meeting on maintenance; Schuyler C. Joyner, Los Angeles, Calif., of the meeting on personnel; V. Harry Rhodes, St. Louis, Mo., of the meeting on plant operation; A. F. Nienhuser, Cleveland, Ohio, of the meeting on purchasing; and John W. Lewis, Baltimore, Md., of the meeting on schoolhouse planning and construction.

Information concerning the meeting or the program can be obtained from the president, Francis R. Scherer, Rochester, N. Y., or H. W. Anderson, secretary, Kalamazoo, Mich.

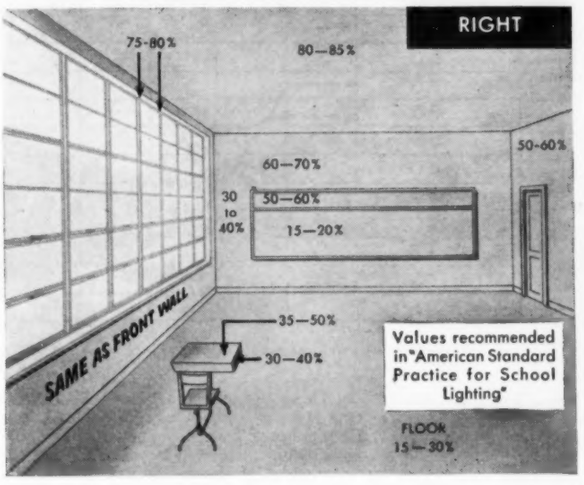
BOONE SCHOOLS MAKING PROGRESS

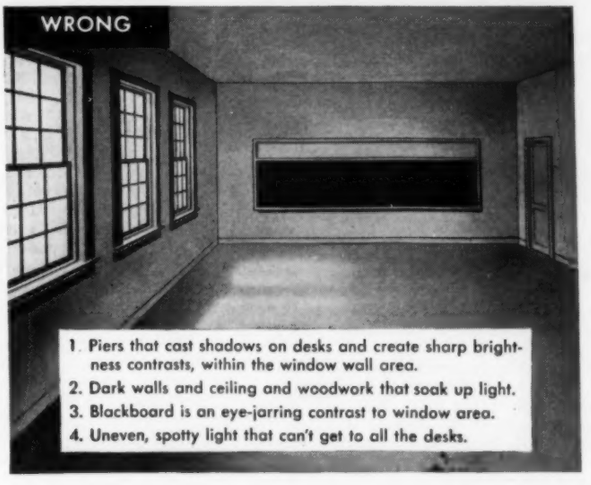
The public schools of Boone, Iowa, at the suggestion of Supt. Donald F. Seaton, have employed a director of elementary education for the school year 1950–51.

During the summer the high school athletic field and homemaking department will be modernized. The athletic field will be equipped with a new quarter-mile running track, new floodlights, and other features. The homemaking department will be provided with four new all-steel unit kitchens, new sinks, stoves, and other equipment. The vocal music room will be remodeled to provide room for three offices for the boys' adviser, the director of elementary education, and the school librarian. Three photographic darkrooms will also be provided as part of a course in photography.

A summer school will be conducted for students in the high schools who wish to make up work failed or to gain extra credits.

DO'S AND DON'TS FOR BETTER CLASSROOM DAYLIGHTING **NO. 3** OF A SERIES

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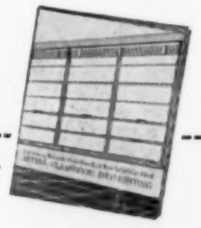

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MILWAUKEE SCHOOL BOARD MAPS BUILDING FOR FIVE-YEAR PERIOD

The school building committee of the Milwaukee board of school directors has recommended and the board has adopted an $18,200,000 five-year building program. The program, the latest revised product of the School Building and Future Sites Program Commission, will be revised still more within the next five years.

"The five-year program is at best a slogan," according to Walter Rilling, school board secretary, who stated that it can never be static. Revisions must be made periodically to meet needs resulting from annexations to the city and population shifts.

Funding of the program is possible in three ways: One is a grant from the permanent improvement fund of the city; another is a bond issue; and a third is an increase from .6 to 2.3 mills per $1,000 in the tax allowance for construction purposes.

Designated as "immediate needs" are the following projects costing $15 million: Remodeling and modernization of old buildings, $6 million; Tippecanoe elementary school, $450,000; portable units at existing schools, $350,000; Northwest Senior High School, $3,500,000; Boys' Technical High School addition, $1,250,000; West Division High School, $2,900,000; new elementary school, S. 56th St., $450,000.

Additional projects, totaling $3,200,000, and classified as "needed in the future," are two elementary schools, and two replacements.

PROGRESS IN WAYCROSS

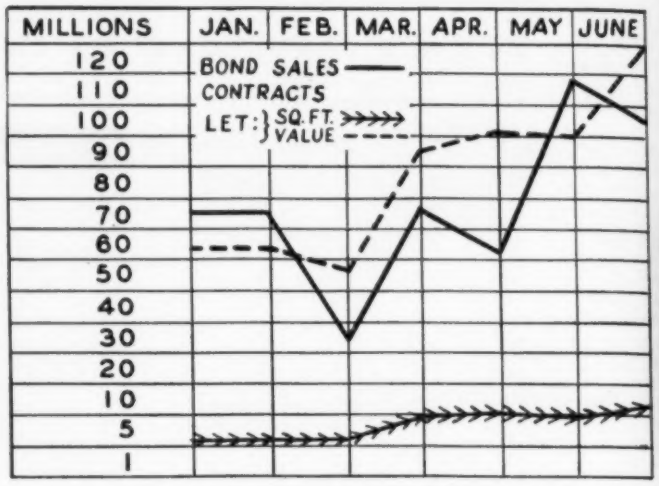
At Waycross, Ga., a survey of the school plant has been conducted, under the direction of Supt. J. D. Salter. The findings and recommendations, published in the form of a report, were made available to the citizens at large and to all civic groups.

The report later became the basis for a proposal calling for a bond issue and a program of expansion and reorganization. The survey recommended the construction of three elementary schools for Negroes, that a seven-five type of organization be formed, and that additions and renovations be made at various schools.

Since February, 1948, a number of projects have been completed, including an addition to the senior high school costing $110,000; a five-room addition at the Williams Heights School, costing $50,000; a new five-room elementary school costing $46,000; a new vocational school with auditorium, housing a department of college work, a commercial school and an evening program and school for war veterans.

All shopwork beyond the senior high school level is handled in a center, located in an old army base outside the city. Classes in the various trades are conducted in this building and it is planned to expand the vocational building to house classes beyond the twelfth grade.

All of the building improvements have been financed with funds obtained from a bond issue and from the sale of the junior high school property. The bond issue amounted to $375,000, and the income from the sale of the property was $200,000.



Progress of school building contracts let in 1950.

SCHOOL BUILDING CONSTRUCTION

During the month of July, 1950, contracts were let, according to Dodge, in 37 states east of the Rocky Mountains, for 784 educational buildings. The contract valuation was $121,167,000.

In 11 Pacific coast states contracts were let during July for 34 school buildings at an estimated cost of $7,873,942.

SCHOOL BUILDING

► Urgent building needs for the St. Louis public school system will cost at least $13,144,000 and perhaps more than $21,000,000, according to Building Commissioner V. Harry Rhodes. Mr. Rhodes' totals, which include construction costs only, were based on educational needs reported by Supt. Philip J. Hickey. These include provisions for schools required by proposed public and private housing projects, alleviation of crowded conditions in some schools, and replacement of four schools.

According to Superintendent Hickey, the most pressing construction needs grow out of public and private housing projects already under construction or nearly ready to start. In this group is a proposed 26-room Negro school, to relieve the Henry School, and to cost $400,000. At least two 32-room schools for Negroes will be required. Private housing construction near Carondelet Park will require three new primary units and the replacement of two portable buildings. Additional facilities will include a new elementary school and a high school in the Westchester Heights area, and additions to the Hadley Technical High School costing $1,900,000.

► The school board of Thomasville, Ga., has undertaken an extensive building program, including an elementary school for Negroes, one for the whites, two new gymnasiums, a stadium for Negroes, and new shops for industrial-arts classes, one for Negroes and one for whites.

► A new elementary school of 12 classrooms is nearing completion at Lake City, Fla. The building is of modern design and houses 400 students. The educational plans were prepared by Supt. Byron P. Hileman. The board is making plans for a school bond election to vote bonds for a county-wide school construction program.

► Toledo, Ohio. Ground has been broken for the first unit of a school building program to consist of a $100,000 gymnasium and community center addition to the Gunckel School. This is one of seven buildings to be under construction this year. The addition of 30 classrooms and two gymnasiums to five buildings and a new 12-classroom school make up the balance of the first-year

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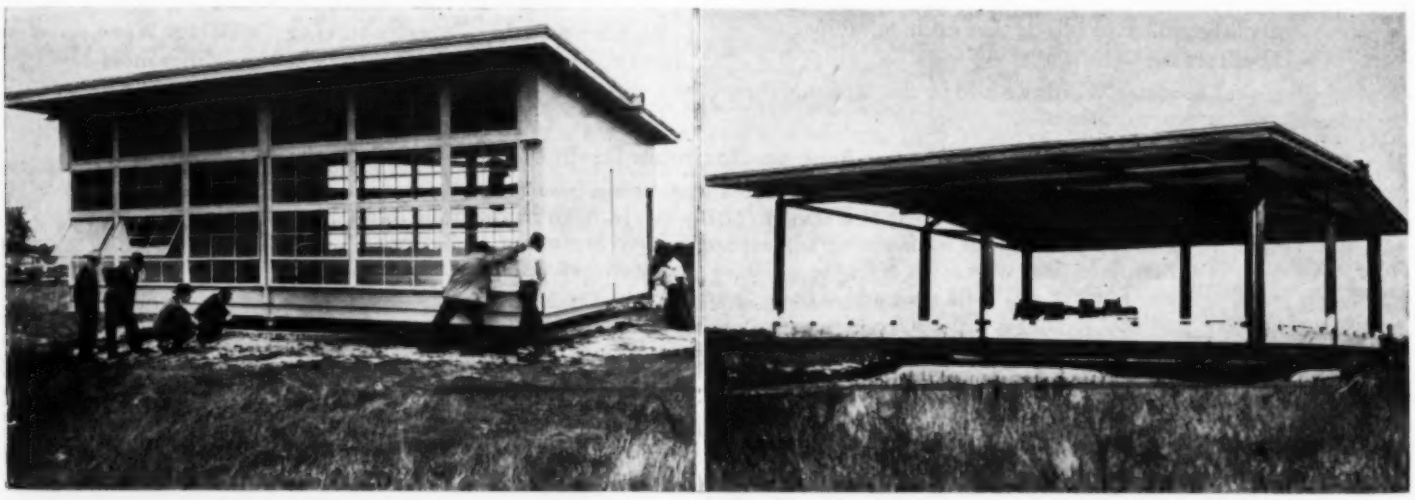

Experimental Classroom building at Texas Agricultural and Mechanical College, College Station, Texas.

The unit is basically a steel cage mounted on a concrete base with wheels which enable turning to any point of the compass. The unit is being used to determine the effects of architectural shapes and finishes as modified by environmental factors of light, air, and sound. The unit is turned to various points of the compass to study lighting conditions, the value of special types of fenestration, ceiling heights and shapes. Research Architect William W. Caudill is in charge of the project and is assisted by Professors E. G. Smith, E. E. Vezey, and a number of Research Assistants.

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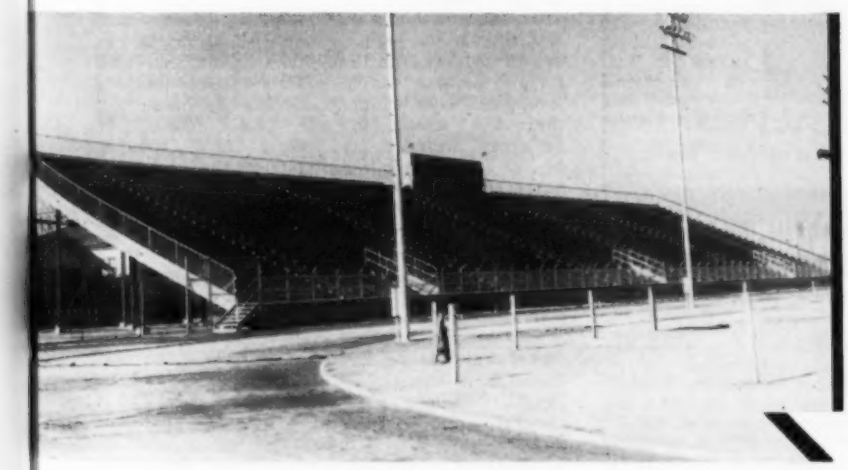

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(Concluded from page 64)

program. The educational planning was done by Supt. E. L. Bowsher and the board of education. Messrs. Peterson, Hoffman & Barber prepared the plans and specifications.

► Evanston, Ill. The school board of District No. 75 has begun work on a school construction program, calling for large additions to four schools and a new elementary school, to cost approximately $1,385,849.

► Two Michigan cities during the spring voted a substantial amount for the construction of new school buildings and additions to existing plants. Flint has voted a $7,000,000 bond issue for new elementary schools, additions to existing schools, a junior college building, a library, and an administration building. Saginaw has approved a $6,000,000 bond issue for a four-point building program, to include a new junior high school, an elementary school, a high school, and additions to four schools.

► Quincy, Ill. Contracts have been let for the construction of the new Adams School, to house a kindergarten and six grades. The architects are Hafner & Hafner, Quincy, and the educational planning was done by Supt. L. O. Little.

► Doylestown, Pa. Construction work has been started on the new senior high school, to cost $2,300,000.

► St. Louis, Mo. The board of education has a new name for a new type school building, which it hopes to build in numbers in the future. Such buildings will be known as the "St. Louis Neoteric Type School."

The Neoteric-type building is a one-story structure, low and long, with a brick veneer and a good deal of glass. It can be erected at a cost of $10,000 per room as compared to the former type of building which cost $30,000 a room.

► The Housing and Home Finance Agency, Washington 25, D. C., has announced new federal grants to schools for school construction programs. A grant of $6,740 has been given to Missoula, Mont., for a high school athletic field, to cost $159,000; a grant of $14,000 to Meredith, N. H., for a high school building, to cost $400,000; a grant of $69,680 to Batavia, N. Y., for three elementary schools, to cost $1,770,576; a grant of $9,660 to Marysville, Pa., for a high school addition, to cost $267,732; a grant of $6,660, to Decatur, Ga., for an elementary school, to cost $165,000; and a grant of $4,360 to Wheeling, Mo., for a high school addition, to cost $120,348.

► The board of education of Troy, Ala., has awarded the contract for the remodeling and enlargement of the Troy elementary school, to cost approximately $160,000. An addition consisting of five classrooms, a cafeteria, and heating plant will be constructed.

► The school board of Dist. No. 38, Albert Lea, Minn., has let the contract for the construction of an elementary school, at a total cost of $635,280. This building contains 13 classrooms, a gymnasium, an assembly room, a cafeteria, health rooms, and office, and was designed by LeRoy Gaarder, of Albert Lea.

► Cincinnati, Ohio. Bids have been received for the construction of the Woodward High School, to cost $2,447,561. Plans and specifications were prepared by Architect Charles F. Sellarius, Cincinnati. It is to be completed and occupied in September, 1952.

► Plans have been approved for the construction of the Westowne elementary school, in Catonsville, Md. The school will contain 12 classrooms, a health suite, a cafeteria-kitchen, and administrative offices. Plans are also in progress for the Maiden Choice School, the Rodgers Forge School, and the Lutherville School.

► The board of education at Askov, Minn., has voted to accept the bids for a new school building to be erected during the fall. The board had previously rejected the bids but, on recommendation of Supt. Harold D. Ause, will complete the structure.

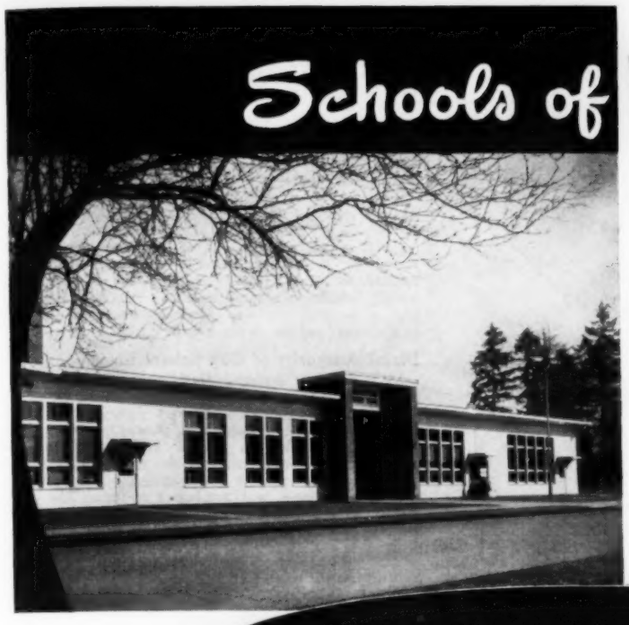
► At Merced, Calif., the board of education has completed the erection of six new elementary schools, varying in size from four to twenty rooms. One school, the Herbert C. Hoover, is an intermediate building, accommodating all of the seventh and eighth grades. All of the schools are of modern functional design, equipped with radiant heating, public address system, drinking fountains, work counters, asphalt-tile floors, and decorative scheme in soft, pastel colors. The buildings were erected at a total cost of $1,250,000, of which $850,000 was allocated by the state. The educational planning was done by Supt. W. Max Smith.

► The Housing and Home Advance Agency, Washington, has announced the approval of a loan of $9,000 for the construction of a school addition for the Zion-Benton Township High School, Dist. No. 126, Lake County, Ill., to cost $263,500; and another grant of $21,920 for a school building at Fond du Lac, Wis., to cost $546,900.

► At Coalinga, Calif., the school board has completed the erection of a five-classroom and library addition to the school, at a cost of $250,000. A five-classroom addition has been erected at Huron, at a cost of $100,000.

► Berkeley, Calif., the board of education is moving along slowly with its $8,000,000 school building program. Three elementary schools have been placed under construction but are still a long way from completion.

► The Colton School District, Colton, Calif., has completed the preliminary plans for a large building expansion program. The educational planning for the several projects was carried out by Paul J. Rogers, superintendent of schools and will involve an expenditure of $2,124,000. The program is to include two elementary schools, a new intermediate school, and additions to four existing structures.



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NEW PUBLICATIONS for School-Business EXECUTIVES

School Design Standards

Compiled by the Division of Schoolhouse Planning. Paper, 32 pp. Published by the State Department of Public Instruction, Raleigh, N. C.

In this collection of school planning standards, Mr. W. F. Credle and his associates have set up principles for the over-all planning of school buildings and for providing complete layouts for the basic units of elementary and secondary schools, including primary and elementary classrooms, gymnasiums, lunchrooms, homemaking rooms. Design data are also provided for the location of furniture and equipment, the arrangement and numerical requirements of plumbing and sanitary fixtures, seating arrangements, lockers, and shower rooms.

Definite recommendations are given for the orientation of buildings for the best daylighting, and suggestions are provided for roof construction, window arrangement, and other practical elements of modern building design.

The entire material is presented in the shape of illustrations consisting of diagrams, plans, and tables. Throughout, the functional aspects of each detail of school building plan and equipment are emphasized, and such problems as special instructional activities, pupil requirements, administrative control, and flexibility for future changes in class organization and teaching method, are strongly taken into account.

With this guide in hand any superintendent and architect should be able to develop a building plan which is economically and educationally efficient.

Crawl Spaces

By Ralph R. Britton. Paper, 16 pp., 15 cents. Published by the U. S. Government Printing Office, Washington 25, D. C.

This reprint of a bulletin, issued several years ago, points out the importance of crawl spaces in buildings and the advantages of adequate ventilation of these spaces through walls, bearing partitions, and loft spaces. The illustrations make clear the damage to steel girders, wood framing, etc., where ventilation is inadequate.

Good Posture in the Little Child

Compiled by the U. S. Children's Bureau. Paper, 25 pp., 10 cents. Federal Security Agency, Washington 25, D. C.

Good posture is much more than merely standing straight; it is the use of all parts of the body with proper balance, ease, and grace. This pamphlet points out the relation between good posture and health in the young child. Examples of good and bad posture are shown and suggestions are given for developing habits of good posture from babyhood into childhood. Parents and teachers are urged to help children in developing good posture.

Space and Equipment for Homemaking Programs

By Ata Lee. Misc. publication 9, 1950. Price, 35 cents. U. S. Office of Education, Washington 25, D. C.

This bulletin provides basic information on the planning of building space and equipment for teaching home-economics subjects at the high school level. Twelve teachers and supervisors have provided materials, suggestions, and criticisms to the author. The 14 plans for rooms vary from an economy layout for a class of 8 to 12, to a very elaborate suite for classes of 24 adolescents or adults. Separate sections of the bulletin take up (*a*) the basic factors of planning as controlled by the educational program, (*b*) the needed space and arrangement of equipment, (*c*) the selection of furnishings and equipment for house care, cookery, clothing, laundering, child care; (*d*) storage facilities; (*e*) general considerations in building; (*f*) factors of safety and beauty; (*g*) check and equipment lists. Throughout the approach is that of planning for fully adequate space and quite complete equipment. Flexibility and adaptability to change are strongly emphasized. The local supervisor and the school executive will find the bulletin a treasury of information from which they can eliminate features that are overelaborate or too costly for a balanced, economical program.

Muncie Plans Better Housing for School Children

Compiled under the direction of R. D. Shaffer. Paper, 23 pp. Published by the board of education, Muncie, Ind.

A report of the work of the school board, the architect, and the superintendent in the educational planning for a new school plant. The report describes the setting for the new school, the planning of the classroom and its equipment, the use of electricity as a teaching aid, the planning of the plumbing, heating, ventilating, and electrical systems, the living surroundings in the interior, the room location, the facilities for special services, and the financing of the building.

Arizona Sanitary Code

Paper, 8 pp. Published by the Arizona State Department of Health, Phoenix, Ariz.

This is Part X of the state sanitary regulations and relates entirely to the sanitation of school sites, buildings, water supply, lighting, etc. It is interesting to note that for artificial lighting the code requires that the total glass area of schoolrooms shall be 20 per cent of the floor area. It also requires that for artificial lighting the minimum foot-candles in classrooms shall be 20 foot-candles in drafting rooms and art rooms. Where fine detail work is done, 30 foot-candles are required; in gymnasiums, 20 foot-candles; in auditoriums, cafeterias, locker rooms, and toilets, 10 foot-candles; and in stairs and corridors, 5 foot-candles.

Recommended Practice of Library Lighting

By a committee of the Illuminating Engineering Society. Paper, 16 pp., 50 cents. Illuminating Engineering Society, New York, N. Y.

This technical bulletin is addressed to architects and librarians as well as to illuminating engineers. It provides (1) an analysis of the seeing tasks performed in a library, (2) a discussion of the environmental problems affecting the design of rooms for library purposes, (3) recommended illumination values, (4) suggestions for effective daylighting of library rooms, (5) recommendations for the arrangement of artificial lighting, including light sources and standards of illumination, and (6) special recommendations for the lighting of reading rooms and book storage areas.

The bulletin will be found particularly helpful by school and college authorities who are developing library plans in connection with school building programs.

Elementary School Classroom

By a committee on building plans, etc. Paper, 28 pp., 80 cents. New England Development Committee, Cambridge, 38, Mass.

A committee of school superintendents, under the guidance of John E. Marshall, Director of School Building Planning for the Massachusetts State Department of Edu-

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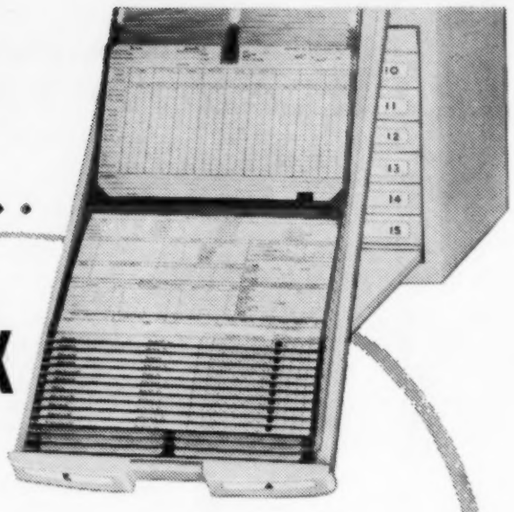

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THE FIRST NAME IN SCHOOL RECORDS SYSTEMS

cation, has prepared this illustrated study of the planning and equipment of elementary schoolrooms.

In a brief introduction, the general characteristics of a modern classroom are outlined and the importance of certain features for lighting and acoustics, as well as for flexibility under various teaching situations, are described. The importance of classroom equipment for the development of learning and other personal habits of children are set up. Perhaps the most instructive part of the pamphlet is a series of plans and sketches of interiors of typical classrooms, (1) of the square type, lighted from two sides; (2) the oblong type, with unilateral lighting; (3) the square type with direct and clerestory lighting; and (4) the L-shaped type, with work alcove, and with lighting from two sides. The pamphlet should be of enormous help in giving school committees an understanding of the implications of plans presented by the superintendent of schools and the architects.

Pupils, Teachers, and School Building Needs in City School Systems

Paper, 11 pp. Published by the Research Division, National Education Association, Washington 6, D. C.

A report on enrollments and school building needs, by city-size groups, as of January, 1950. The information is based on reports from 2235 school systems in cities over 2500 population. The information includes estimated total enrollment for 1948–49 and 1949–50 for both public and private schools, estimated additional classrooms needed in January and September, 1950, estimated classrooms under construction for 1950–51, classrooms being constructed for 1950–51 and total needed by September, 1950, and total classroom teachers employed on substandard certificates.

Statistics of the Board of Education, Toronto, Canada

Compiled by C. H. R. Fuller, business administrator, and A. Hodgkins, deputy business administrator. Paper, 54 pp. Published by the board of education, Toronto, Canada.

A statistical report for the year 1949–50, it includes revenue and expenditures, capital costs, unit costs, sundry general statistics, and balance sheets. It also includes comparative figures on revenues and expenditures for the years 1939, 1944, 1947, 1948, and 1949.

New and Unfinished Business: A Report of School Physical Needs

Compiled by Charles C. Mason, Supt. Paper, 23 pp. Issued by the board of education, Tulsa, Okla.

This booklet takes the form of a report on the capital expenditure needs of the Tulsa public schools. The report is being studied by the Tulsa County Master Plan Committee, which will make recommendations for bond issue elections after the studies have been completed.

Finance and Business Administration

Bulletin No. 2, Review of Educational Research, April, 1950. Published by the American Educational Research Association, Washington 6, D. C.

This review of the educational literature on school finance embraces the three-year period, October, 1946, through September, 1949. Chapter I covers most of the research in the general field of school finance on both state and federal levels. The remaining chapters are devoted to school district reorganization in relation to finance, educational costs and their analysis, budgeting and accounting, business administration, etc. A brief bibliography and an index are included.

Fiscal Authority of City School Boards

NEA Research Bulletin, April, 1950. Price, 50 cents. National Education Association, Washington 6, D. C.

This bulletin provides a thorough survey of city budgetary policies and procedures as allowed under the state laws. Separate chapters discuss taxation, methods of control of school funds and records, the fiscal aspects of school plant replacements and management, the selection of school personnel, and purchasing methods. The study makes clear that an increasing number of city boards of education are either totally independent or at least independent so far as taxation and budgeting are concerned.

School Buildings

Special Issue, Maine Schools, State Department of Education, Augusta, Me.

This modest publication contains illustrations and floor plans, together with construction and cost data, of 14 recently completed high schools and elementary schools. Except for the fact that the illustrations are so small that the plans are hardly legible, this bulletin gives impressive evidence that Maine has gone modern in its new school building construction and is putting up educationally most effective town and rural schools.

Costs Per Pupil in Average Daily Membership in Ohio City School Districts
Costs Per Pupil in Average Daily Membership in Ohio County School Districts
Costs Per Pupil in Average Daily Membership in Ohio Exempted Village School Districts

Compiled by John H. Herrick and William L. Carter. Paper. Bureau of Educational Research, College of Education, Ohio State University, Columbus, Ohio.

The analyses of 1948–49 expenditures of Ohio City, County, and Exempt Village School Districts. Each report includes statistics: (1) comparative average costs of current and other expense items, (2) costs per pupil in average daily membership for current expense items, (3) costs per pupil in average daily membership for total current expenses, debt service, total payments, and capital outlay, and (4) average daily attendance, average daily membership, and conversion factors. In addition, the report on city school districts contains average current expense cost and its percentage distribution.

Brightness Limitations in Schoolrooms

By F. C. Winkler and J. J. Neidhart. Illuminating Engineering Magazine, December, 1949.

This study of a typical schoolroom describes the effectiveness of various types of fluorescent fixtures and constitutes a practical criticism of the I.E.S. lighting standards.

How Many
How Soon

Pamphlets prepared by John H. Moehle. Paper, 18 pp., ?? each. Published by the Onteora Central School, Dist. No. 1, Phoenicia, N. Y.

The board of education of Onteora Central School, Dist. No. 1, of Ulster County, N. Y., has begun the publication of four pamphlets to acquaint the voters and school patrons with the pressing needs of the schools for new school structures.

Pamphlet No. 1 entitled, "How Many," shows that there is need for school facilities for 920 children. Supporting evidence is given in the way of studies of birth trends: past, present, and anticipated school enrollments; employment and sociological conditions.

The second pamphlet, "How Soon," suggests that the new school should be built immediately. The board of education has engaged a competent architect and is preparing a calendar listing the dates for the bond election, for the delivery of the preliminary plans, the working drawings, the letting of the contracts.

Both publications have an interesting informality which grows out of the author's understanding of the people of the seven towns which constitute the Central School District.

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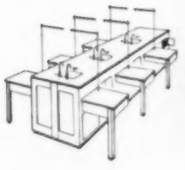
For work-designed laboratory equipment  it's *Hamilton*, of course!

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SCHOOL ADMINISTRATION IN ACTION

THE KELLOGG PROJECT FOR IMPROVING SCHOOL ADMINISTRATION

A nationwide project for improving administration in public school systems, involving grants exceeding $3,000,000 over a five-year period, has been undertaken by the W. K. Kellogg Foundation, of Battle Creek, Mich.

Under the Foundation grants, the Chicago, Columbia, and Harvard Universities, and Teachers College, will set up project centers within their schools of education designed to assist school administrators. Grants of more than $200,000 have been allotted to each of the universities. The project has been developed in co-operation with the American Association of School Administrators, the National Council of Chief State School Officers, and the Department of Rural Education of the NEA.

CONTINUE RELIGIOUS EDUCATION

At Springfield, Ohio, weekday religious education classes will be held in public schools during the 1950–51 school year under a decision of the board of education.

In passing its order the board called upon the local churches to maintain the standard of instruction in church classes prevailing in other classes of the schools.

Superintendent of Schools E. E. Holt in commenting on the plan, said: "I am informed that classes in religious education have continued to be operated in public school buildings in Findlay, Lima, and Fremont. There apparently has been no negative reaction to this practice in those cities.

"During the past two years the classes in Springfield have been held in churches. This has involved the necessity of paying for transportation and the providing of hostesses to accompany pupils from the school buildings to the church and return.

"Unless there is opposition registered by the board, I propose to advise the Council on Weekday Religious Education that the classes may be held in the school building next year.

"In no case is a pupil permitted to attend such classes without the written permission of the parent or guardian."

CRYSTAL FALLS ADOPTS NEW ATHLETIC POLICY

The board of education at Crystal Falls, Mich., with the approval of Supt. K. W. Schulze, has adopted a new athletic policy in which the measure of success of the program is not to be the winning of contests but rather a means for the development of youth. The new policy outlines 14 goals which are to be attained:

1. There must be close and co-operative relationships in all departments of the school.
2. There must be respect for all phases of the educational program and those giving leadership in its various aspects.
3. There must be the highest type of conduct at all times in working with youth. Profanity has no place in the training of youth.
4. There must not be any attempt to usurp certain prerogatives of parents. Participation in one activity should not preclude reasonable activity in others which may or may not run concurrently.
5. Eligibility will be determined by an eligibility committee composed of two teachers and the high school principal and will be based on the traits set up in the goals and the working up to capacity as determined by the several criteria.
6. There must be a positive interpretation of policy and regulations which are set up for and in the interests of the athletic and physical education departments.
7. Athletic policy shall be determined by the board of education and administered by the school administration.
8. An Athletic Control Committee consisting of a board member, the superintendent, principal, coach, and a teacher shall be instituted. This committee will periodically review the athletic program in the interests of the youth and consistent with the goals.
9. In the interests of closer supervision a member of the coaching staff shall not coach sports running concurrently unless personal supervision may be provided and assured.
10. During a season in which a coach of a sport is not actually coaching he must be expected to assume responsibility in line with those assumed by other teachers.
11. A program of physical education consistent with the best and accepted practices must be adhered to. Physical education must not be subservient to an athletic program. All aspects of the physical education program must be closely supervised.
12. A complete intramural program should be provided that the greatest number may have opportunity to participate as members of teams in the various sports. Athletic interest rather than athletic ability should determine team organization.
13. In representing the Crystal Falls schools in athletic conferences and meetings the policy of the school should be reflected by its representatives.
14. Athletic schedules should be so arranged that Sunday use of the school facilities by school organizations be unnecessary.

LOGAN SCHOOLS STUDY OWN EFFICIENCY

With the co-operation of high schools and junior high schools, Superintendent Lloyd M. Theurer and the administrative staff of Cache district schools, Logan, Utah, are planning a follow-up survey of school graduates. It is believed that through this survey the high school curriculum can be more wisely evaluated and the guidance and counseling service modified so as to be more helpful and effective to the students.

Cache County schools are in the midst of a testing program wherein general achievement tests are administered to all third-, fourth-, seventh-, and eighth-grade pupils. General reading tests are given to fifth- and sixth-grade children, learning aptitude tests to third and seventh graders. All tests are administered as near the same date as possible and under as near identical conditions as possible. The tests are presented by Glen R. Winn, assistant superintendent, Blanche Nelson, elementary supervisor, and S. A. Dunn, counselor guidance director of South Cache high school.

To provide an opportunity for student expression and to create better public relations by interpreting the school systems to the public, city schools are sponsoring and producing radio programs over station KVNU every Tuesday night throughout the school year.

► A survey of the city schools of Troy, Ala., has recently been completed by the research and survey staff of the Alabama Department of Education. A report on the results of the survey has been presented to the board of education by Dr. C. P. Nelson, director of the Division of Administration and Finance of the State Department of Education.

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THE SCHOOL ANNUAL REPORT IN NEWSPAPER FORM

The board of education at West Hartford, Conn., issues the superintendent's Annual Report in the form of a 16-page tabloid newspaper, fully illustrated and describing in the form of brief articles, the chief accomplishments of the schools during the previous year. The latest Annual contains articles under such significant titles as:

Growing School Population Most Pressing Problem for Board.
Investigate Pupils Who Quit School.
Teachers Initiate Extensive Study of Curriculum Problems.
Board Makes Changes in Administration.
Committee Urges Enlargement of Medical Service and Nursing Staff.
Morton Sees Increase in Use of Audio-Visual Aids.

The report is fully illustrated with human-interest pictures and with portraits of school executives and staff members. It includes in tabular form, outlines of the child guidance services, the annual football schedule, a complete directory of the schools, a financial statement of receipts and disbursements and of capital outlay and debt service.

The most important section of the report is in the form of an editorial page, containing Supt. Edmund H. Thorne's Annual Report to the board of education and the community.

Parents are urged to not only read the report but to retain it for reference in connection with their children.

SCHOOL ADMINISTRATION

► The Highland public schools of Highland, Ill., has taken part in the consolidation program of the state and are now known as the Highland Community Schools. The new district, legally known as the Highland Community Schools Unit No. 5, Madison County, comprises 200 square miles of territory and five additional incorporated cities. The consolidation has increased the population by 10,000 persons and has added about 1000 additional children to the present school population of the former public school.

Under the direction of Supt. John DeLaurenti the district has set up plans for the transportation of students to centers located in small cities in the area. It has employed specialists in education to undertake remedial work, speech correction, and school nursing service. The administrative and technical staff will be expanded to supervise the entire grade program. All high school students will be transported to Highland which has been made the center for high school instruction.

► Lake City, Fla. During the summer, the school board sponsored a summer recreation program, which attracted about 250 children daily. The program included a day camp program and a remedial reading project participated in by 68 students.

► Independence, Mo. Beginning with the fall school term, cafeterias in the schools will be operated under the auspices of the board of education. Mr. Paul Landers has been named director of all cafeterias.

► At Palo Alto, Calif., a camping program for sixth-grade students will be conducted as a part of the elementary school program during the school year 1951. An additional curriculum coordinator has been added to the school staff to be responsible for the consultant service in the primary grades.

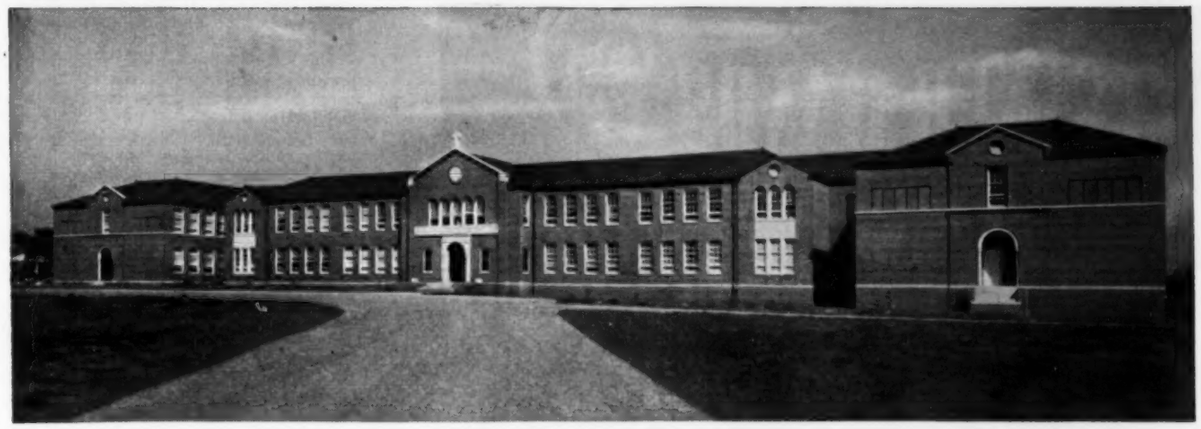
► The high school at Munising, Mich., celebrated its golden anniversary in June, 1950. In 1900, one girl was graduated. This graduate, Mrs. Nellie Hallman-Allen, living at Seattle, Wash., returned and was the honor guest, and received a new diploma with the 1950 class. Since 1900, 1712 have been graduated from the high school.

► The high school at East Hampton, Conn., has been conducting a high school program, which calls for a 50 per cent increase in student load. The program, prepared by Supt. E. A. McDonald, Jr., utilizes correspondence study, work experience, and has a holding power of better than 95 per cent of all high school age pupils in the community.

► During the summer, the governing board of the LaMesa-Spring Valley School District, at LaMesa, Calif., conducted a full-time summer recreation program in five schools. The program was financed by the communities in which the schools were conducted, and the school board supplied the buildings, supplies, and equipment on a co-operative basis. District Supt. Glenn Murdock was responsible for the screening and employment of recreation personnel and the district administrative personnel were used for advising and co-ordinating the program. An average weekly attendance of 1000 children was maintained during the summer months and parents of children co-operated as assistants to the recreation director.

With the opening of the school year in September, the school district is using for the first time a new central office system of maintaining pupil attendance. The change was effected to provide more time for teachers to work with children and to relieve them of the burden of bookkeeping. A suitable form and indexes have been introduced to aid in the operation of the system.

► Bennington, Okla. The school board has expanded the educational facilities with the addition of a department of industrial arts and the expansion of the home economics and vocational agriculture departments.



St. Jude Educational Institute, Montgomery, Ala., is fire-safe because it is built with Bethlehem Open-Web Joists in combination with concrete floor slab and plaster ceilings. Architect: Wilmot C. Douglas, Birmingham, Ala.; Owner: City of St. Jude, Rev. Harold Purcell, Director, Montgomery, Ala.

WHEN PLANNING A NEW SCHOOL

Make it Fire-Safe!

1 ASPHALT TILE OR OTHER FINISH 2 STEEL JOIST 3 CONCRETE SLAB 4 METAL LATH 5 PLASTER CEILING

Cross section of typical Bethlehem Open-Web Joist installation. This construction, with concrete slab and plaster ceiling, forms effective barrier against fire. Asphalt tile, linoleum or other finishes may be used over the concrete.

Fire-safety should be one of the first considerations when planning a new school.

Fire-safe schools can be built, and within budget limitations, by using Bethlehem Open-Web Steel Joists in combination with concrete floor slab and plaster ceiling. This method of construction is economical, and provides floors which are noncombustible. It also permits maximum area between firewalls.

Bethlehem Open-Web Joists offer other worthwhile advantages, too. They make possible floors which are shrink-proof, sound-retardant, and vibration-resistant. They are immune to attack by vermin. They save construction time, because pipes and wiring can be run through the open webs of the joists. They can also be used to good advantage in roof construction.

Your architect will be glad to talk with you about the use of Bethlehem Open-Web Joists in school construction. Get in touch with him now. Or, if you prefer, write to us at Bethlehem, Pa., for full information.

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SCHOOL FINANCE AND TAXATION

URGE CHANGES IN SCHOOL FINANCING IN PHILADELPHIA

The Philadelphia, Pa., Chamber of Commerce has recommended the imposition of a $5 per capita tax in the Philadelphia school district to replace existing taxes, which it has blamed for the flight of $100,000,000 in capital from the city in the past four years. Changes in school financing are needed, chamber officials said, to halt this drain on the city-wealth and bring to an end serious handicaps imposed on businessmen.

Targets of the chamber report, which followed a survey, were the four-mill personal property tax imposed by the school district in 1947 and a new temporary one-mill gross receipts tax.

The chamber proposed instead that the General Assembly authorize the school district to collect the $5 per capita tax. Chamber officials said the plan would mean little change in total revenue and argued that it might yield a surplus of more than $3,000,000 by 1951, if the school expenditures are kept at the present level.

Chamber of Commerce president Ralph Kelly called the four-mill personal property tax the "most crippling" of school levies. He said it was the only instance in the state where such a tax for school purposes had been established on top of an existing four-mill county personal property tax. He declared the resulting eight-mill personal property tax "has brought about an exodus of more than $100,000,000 in bonds, stock, and mortgage wealth from the city during the last four years."

The second proposal in the commerce school-tax reform program is the elimination of the temporary one-mill gross receipts tax which is yielding the school district $6,000,000 in 1950. The chamber estimated that the $5 per capita tax would yield $5,700,000 annually. The study of school finances which was prepared by Leonard A. Drake, staff economist, showed school expenditures have increased at a markedly greater rate than city expenditures in the past 30 years.

SCHOOL FINANCE

► A budget of $19,156,945 has been adopted by the board of education of St. Louis, Mo., which is $320,779 more than the estimated receipts.

► The school board of Little Rock, Ark., has prepared a budget for 1951 calling for $2,549,395. The largest item is $1,807,843 for instructional expenses.

► The Wichita, Kans., school board has adopted a budget of $10,782,472 for the school year 1950–51. The new budget includes $4,189,386 raised through bond issues for school construction projects.

► Lincoln, Neb. The board of education has approved a budget of $3,181,881 for the school year 1950–51. Of the total, $2,811,319 is for the general fund, and $137,909 for the building fund.

► At Oklahoma City, Okla., the school board has adopted a budget of $6,759,674, which represents an increase of $795,724 over the year 1949–50. A large part of the increase is due to new teachers and new instructional supplies.

► The school board of Highland Park, Tex., has adopted a budget of $1,271,146 for the year 1950–51, an increase of $44,687 over 1949–50. A large part of the budget, $934,239, will go for salaries of teachers.

► Rock Island, Ill. The school board has adopted a budget of $1,587,630 for 1950–51, which is an increase of $339,726 over last year.

► Butte, Mont. The school board has adopted a budget of $1,185,266 for 1950–51, which is an increase of $41,826 over 1949–50. The largest item is $631,275 for instructional expenses.

► Texas City, Tex. The annual budget for 1950–51 has been set at $1,096,599, which is a substantial increase over the estimate for 1949–50.

► The board of education of Cincinnati, Ohio, has adopted a budget calling for $14,364,840 for the school year 1950–51, which is an increase of $698,856 over 1949–50. The instructional division shows a total increase for the department of $280,152, including salary increments, provisions for new teachers, etc. The division of operation of the school plant shows an increase of $44,390, which is due to increases in the cost of personnel, increases in cost of supplies, and other items.

► The school board of Boise, Idaho, has adopted a budget of $2,017,500 for the school year 1950–51. The largest increase is for instructional expense — from $946,754 to $1,081,530.

► The board of education of Kansas City, Kans., has approved a budget calling for $4,574,443 for the school year 1950–51. An increase of $151,206 in the general fund has been attributed principally to the addition of 18 new instructors and normal salary increases. The sum of $193,990 has been added to the accumulating fund for building improvements. There is an estimated carry-over in the fund of $442,040.

► Halsey, Stuart & Co. have bought $950,000 worth of school bonds, maturing 1952–70, issued by the Cuyahoga Falls, Ohio, city school district. The price received by the school board was 100.884 for a 2 per cent coupon.

► Ulysses, Tex. The school board has sold a $475,000 bond issue of the rural school district to the First Securities Co., of Wichita, at interest rates ranging from 1½ to 2 per cent. The bonds will mature in seven years. The first bonds to mature in three years, bear an interest rate of 1½ per cent, and those maturing the last four years, carry an interest rate of 2 per cent. The retirement of the bonds over a short period is expected to result in a saving of $14,000 in interest over a ten-year maturity.

PERSONAL NEWS

PERSONAL NEWS OF SUPERINTENDENTS

► HARRY R. MCPHAIL has been elected superintendent of schools at Davenport, Iowa, to succeed Steven N. Watkins.

► SUPT. M. W. HUMMEL, of Brookfield, Ill., has been re-elected for a three-year term. Hummel has completed his fourth year in his present position.

► DR. FRED W. HOSLER, of Oklahoma City, Okla., has become superintendent of schools at Lynwood, Calif. In explaining his resignation from the Oklahoma City Schools, Dr. Hosler told the press that in Oklahoma City "the physical strain of trying to build an educational program without adequate funds is too great for any one person."

► SUPT. CHARLES C. MASON, of Tulsa, Okla., has been re-elected for his seventh consecutive year.

► J. CHESTER SWANSON, formerly deputy superintendent of schools at Oklahoma City, Okla., has been elected superintendent, to succeed Fred W. Hosler who has resigned.

► The board of education of San Francisco, Calif., has re-elected DR. HERBERT C. CLISH as superintendent for a four-year term, at an increased salary of $20,000 a year. Dr. Clish has completed three years of his first four-year contract.

► J. E. CRUM, of New Berlin, Ill., has accepted the superintendency at Streator, where he succeeds Gilbert Goza.

► AMBROSE CALIVER has been appointed assistant to the U. S. Commissioner of Education, Dr. Earl James McGrath. Dr. Caliver, a veteran government worker, has been a member of the Office of Education staff since 1930. His last appointment was that of specialist for the higher education of Negroes.

► MELVIN F. ASHER, of Rhinelander, Wis., has been elected superintendent at Tomahawk, to succeed J. C. Rutherford, who resigned.

► MICHAEL DUDA is the new superintendent of schools at Monessen, Pa. He succeeds SAMUEL E. MCDONALD, who has taken the superintendency at Coatesville.

► ROBERT E. MCKINNEY, formerly superintendent of the Williamson County, Ill., schools, has accepted the position of superintendent of the elementary and high school systems at Marion, Ill.

► W. M. OSTENBERG, of Coffeyville, Kans., has accepted the superintendency at Salina. He is succeeded by V. A. KLOTZ, formerly principal of the Kindley High School.

► BONNER FRIZELL during the past 37 years superintendent of schools at Palestine, Tex, has retired. Frizell has been active in Texas school affairs for many years and his retirement has been widely regretted as a great loss to Texas education.

► J. RUSSELL HIATT, of Redkey, Ind., has accepted the superintendency at Crown Point, where he succeeds Lee L. Eve.

► EDWARD O. BOSSERT has been elected superintendent of the Lemont township high school, at Lemont, Ill., to succeed Virgil Puzzo, who has taken a position in Chicago.

► LESTER H. BAUMANN is the new superintendent of schools at Yankton, S. Dak.

► JOSEPH LINSTER has been elected president of the school board at Crookston, Minn. IVER SWANSON is clerk, and OSCAR FREDRICKS, treasurer.

► PAUL A. GRIGSBY, formerly superintendent of the Community High School District of Granite City, Ill., has been appointed general superintendent of the new Community Unit School District of Granite City. The new district includes one high school and 18 elementary schools.

► PAUL WEAVER, of Chicago, Ill., has been elected superintendent of schools at Midlothian.

► DR. LEE M. THURSTON, of Lansing, Mich., has been appointed a member of the Council of Advisers to the U. S. Commissioner of Education. Dr. Thurston is one of 25 university presidents and state school heads named to the Council to advise on the proposed program of the federal agency.

► JAMES F. STAGE has accepted the superintendency at Concordia, Mo.

► OTTO G. RUFF has assumed the office of state superintendent of Public Instruction for Nebraska, succeeding Wayne O. Reed.

► FRED E. BRYAN, formerly director of elementary education, has been elected superintendent of schools at Uniontown, Pa., to succeed O. H. English, who has gone to Abington.

► SUPT. V. W. MILLER, of Pasadena, Tex., has been re-elected for a new five-year term. Miller has completed his fifth year as head of the school system.

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► CHARLES E. HAWKES, superintendent of schools at Salina, Kans., has resigned to accept a position with the architectural firm of Joseph W. Radotinsky, of Kansas City, Kans., as school consultant.

The Salina board of education has employed W. M. OSTENBERG as superintendent, to succeed Hawkes.

► DENVER D. KIRKLAND, of McAlester, Okla., has accepted the superintendency of the Putnam city consolidated schools at Putnam, Okla.

► El Dorado, Kans. PAUL HAWKINS became superintendent of El Dorado schools on August 1.

► The Kansas City, Mo., board of education has failed to renew the employment contract of Supt. Harold E. Moore. Dr. Moore and the board of education have been in conflict due to the fiscal difficulties of the school system.

► SIMON H. MOORE, of Norwich, Conn., has been elected superintendent of schools at Cromwell, to succeed Daniel Chubbuck, who has accepted the position of rural supervisor for the State Department of Education.

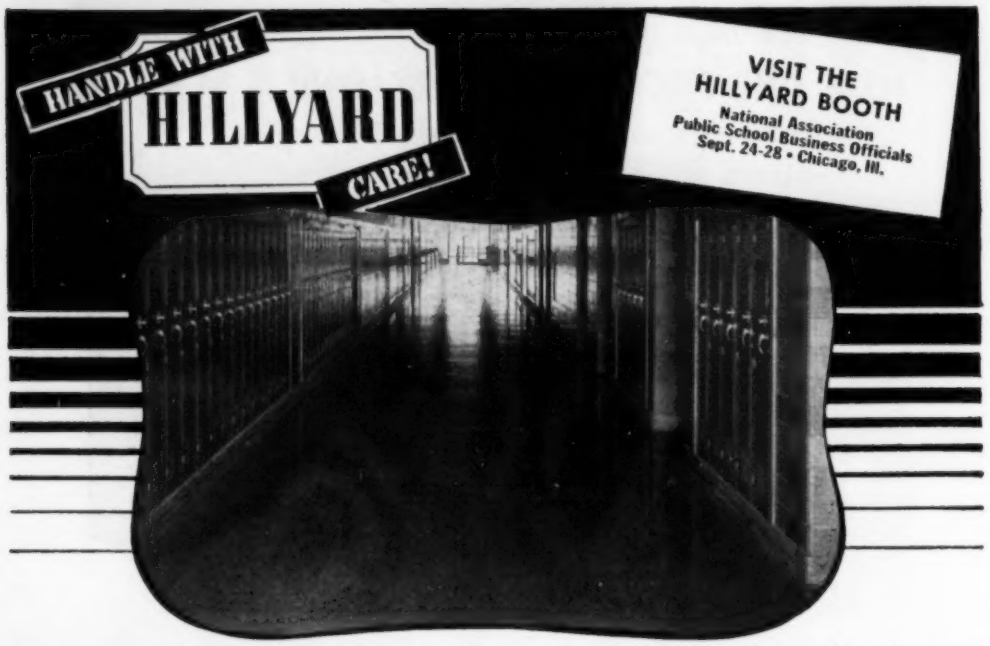
► JAMES N. PEPPER, of Rochester, Mich., has accepted the superintendency of the Brighton Area schools at Brighton, Mich.

► Supt. Charles E. Varney, of Stoneham, Mass., who retires August 31 after 21 years' service in the schools, was honored at a testimonial dinner and reception in the Town Hall Auditorium on June 7. Following greetings from the town and the school committee, the testimonial address was given by State Commissioner of Education John J. Desmond. A gift from the citizens was presented by Millard D. Taylor, and Ralph R. Patch presented a testimonial.

Raymond C. Burdick has been elected to succeed Mr. Varney for the school year 1950-51.

► FRANCIS A. BAGNALL, 83, for many years a Massachusetts and Vermont educator, died in Boston, July 31. A former president of both the Hyannis and Framingham Teachers' Colleges, in Massachusetts, he had also served as president of the Vermont State Teachers' Association, and as secretary of the Vermont State Board of Normal School Commissioners. He was graduated from Wesleyan University.

► LAWRENCE TODDHUNTER, of Selma, Calif., has accepted the position of assistant superintendent in charge of elementary education at Fresno.



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GENERAL EDUCATIONAL CONVENTIONS

October 1–3. *Council of School Superintendents,* at Saranac Inn, N. Y. Headquarters, Saranac Inn. Secretary, E. L. Ackley, Johnstown. Attendance, 400.

October 2–6. *National Recreation Congress,* at Cleveland, Ohio. Headquarters, Hotel Statler. Secretary, T. E. Rivers, 315 Fourth Ave., New York 10, N. Y. Exhibits, Mr. Rivers. Attendance, 1200.

October 4–7. *California Association of School Administrators,* at San Diego, Calif. Headquarters, U. S. Grant Hotel. Secretary, Dr. John A. Sexson, 35 N. Raymond Ave., Pasadena 1, Calif. Exhibits, Dr. Sexson. Attendance, 1000.

October 5–6. *Illinois Association of School Administrators,* at Peoria, Ill. Headquarters, Pere Marquette Hotel. Secretary, P. Shafer, Macomb, Ill. Attendance, 300.

October 8–9. *Texas Association of School Administrators,* at Austin. Headquarters, Driskill Hotel. Secretary, Frank W. Richardson, Henrietta. Attendance, 400.

October 8–11. *National Institute of Governmental Purchasing,* at Milwaukee, Wis. Headquarters, Hotel Schroeder. Executive Director, Albert H. Hall, 730 Jackson Place, N.W., Washington 6, D. C. Exhibits, Mr. Hall. Attendance, 1000.

October 9–11. *Fifth National Conference of County and Rural Area Superintendents,* at Columbus, Ohio. Headquarters, Deshler-Wallick Hotel. Secretary, Howard A. Dawson, Washington, D. C. Attendance, 1000.

October 15–17. *New England Association of School Superintendents,* at Swampscott, Mass. Headquarters, New Ocean House. Secretary, E. W. Ireland, Somerville, Mass. Attendance, 800.

October 16–20. *National Safety Council,* at Chicago, Ill. Headquarters, Stevens Hotel. Secretary, R. L. Forney, 425 N. Michigan Ave., Chicago, Ill. Exhibits, Mrs. C. H. Miller, Chicago. Attendance, 10,000.

October 24. *American School Health Association,* at Missouri. Secretary, A. O. DeWeese, M.D., Kent, Ohio.

October 25. *Indiana City and Town Superintendents Association,* at Indianapolis. Headquarters, Lincoln Hotel. Secretary, Harry H. Mourer, Supt., Bedford, Ind. Attendance, 150.

October 30–November 1. *American Public Health Association,* at St. Louis, Mo. Headquarters, Kiel Auditorium. Secretary, R. M. Atwater, M.D., 1790 Broadway, New York 19, N. Y. Attendance, 4500.

NEWS OF SCHOOL BOARD OFFICIALS

► The board of education at Holland, Mich., has reorganized with the election of ALBERT E. LAMPEN as president; ERNEST V. HARTMAN as vice-president; and JOHN OLERT as secretary. DR. LESTER J. KUYPER was elected as a new member of the board.

► The Tyndall, S. Dak., school board has reorganized with BERNARD POST as president; T. K. PTAK as vice-president; and FRANK VLADYKA, JR., as clerk.

► The school board of Henryetta, Okla., has reorganized with TED BERRY as president; GLEN COLEMAN as vice-president; and W. V. LOWE as treasurer.

► FRED J. BREWER has been elected president of the board at South Milwaukee, Wis. MRS. JEAN HEUSTON has been named vice-president, and LOUIS J. MOSAKOWSKI is secretary.

► JOHN A. GEIST has been elected president of the board at West Allis, Wis.

► ALVIN PARIS has been re-elected president of the board of education at Alva, Okla. GEORGE MURRAY was re-elected vice-president, and OMAR HILL was named clerk.

► The school board of Tulsa, Okla., has reorganized with CLEO C. INGLE as president; MRS. C. O. WILLSON as vice-president; MRS. BEATRICE RAY as treasurer; and MRS. ZELMA FLEMING as clerk.

► DR. FREDERICK J. HIRN is the new president of the board at Escanaba, Mich. MRS. NORMAN L. LINDQUIST is vice-president, and CHARLES L. FOLLO is secretary.

► The board of education at Waycross, Ga., consists of seven elected members, plus the city manager, who serves in an ex officio capacity. The board members are elected for four-year terms. The terms of three members expire in one election and the terms of the other four expire in the next election. HUBERT BRADSHAW is president of the board; J. A. SOLOMON is vice-president; and SUPT. J. D. SALTER serves as secretary-treasurer.

► DR. M. A. BORCHARDT has been elected president of the board at New London, Wis.

► K. C. LEA, an instructor in the high school at Clovis, N. Mex., has been appointed business manager for the Carlsbad board of education. He succeeds Hoyt E. McMinn, who resigned July 1.

► The board of education at Glassport, Pa., has reorganized with DR. CARL P. MASCH as president; GEORGE FASICZKA as vice-president; and JOSEPH L. SHAFFER as treasurer.

► The board of education of Lincoln, Neb., has reorganized with DR. JOHN P. SENNING as president; and ELMER E. MAGEE as vice-president. Dr. Senning is completing his third year of a six-year term as a board member.

► CHARLES BUDGE has been elected president of the board at Bemidji, Minn. THOMAS STEARNS was elected vice-president, and DR. A. C. GILMER, clerk.

► NORTON E. MASTERSON has been re-elected president of the school board at Stevens Point, Wis. LESLIE COURTNEY is the new member of the board.

► The school board at Madison, Wis., has reorganized with GLENN W. STEPHENS as president; DR. R. W. HUEGEL as vice-president; W. N. MCDANIELS as secretary; and RAY F. SENNETT as treasurer.

► Two new members, AL JACKSON and WILLIAM A. TOLSON, have been elected to the board at Torrance, Calif., for four-year terms, beginning July 1, 1950. One holdover member, JUDGE JOHN A. SHIDLER, was returned to the board.

► HARLAN H. ZODTNER has been elected president of the board at Janesville, Wis. WILLIS RABBE was elected vice-president, and SUPT. V. E. KLONTZ was re-elected clerk.

► The National Citizens Commission for the Public Schools has announced the appointment of MAURICE D. BEMENT as director of the new regional office in Louisville, Ky. This is the first of several regional offices. The southern office, it is expected, will provide, in a limited way, the same services to citizens' groups that the national office provides generally. This includes the circulation of material dealing with all phases of citizen activity for school improvement, speaking appearances, and specialized assistance. Mr. Bement has had wide experience in both business and public life, and is well known throughout the south for his five years' service as executive director of the Committee for Kentucky, a state-wide organization for community and rural betterment.

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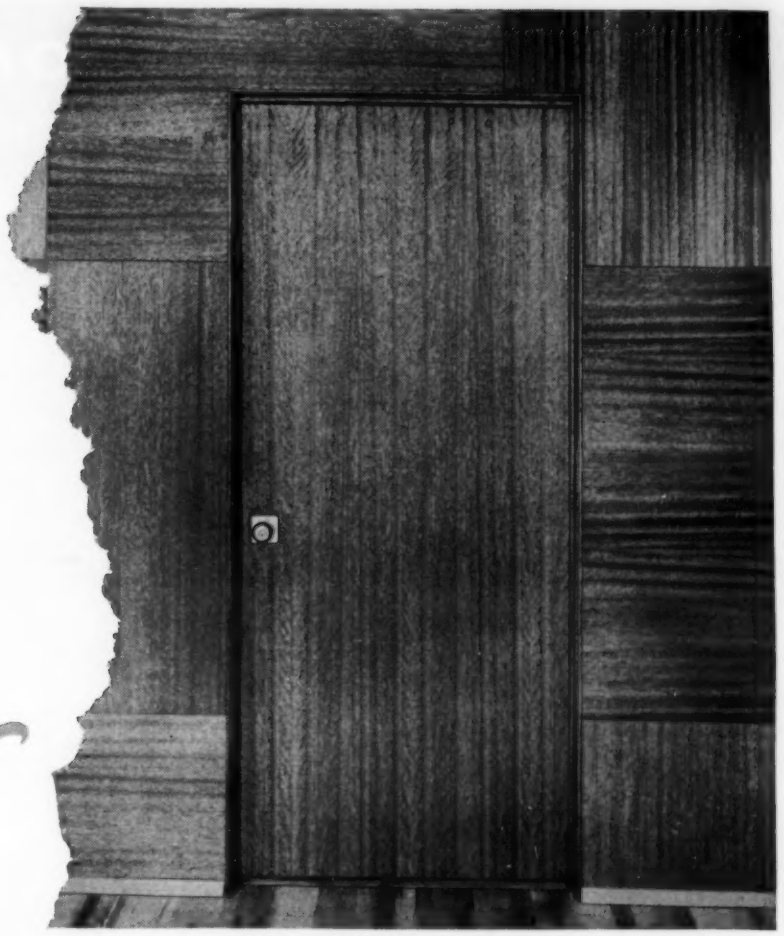

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2 Extraordinary Strength and Durability

3 Permanent Resistance to Vermin and Decay

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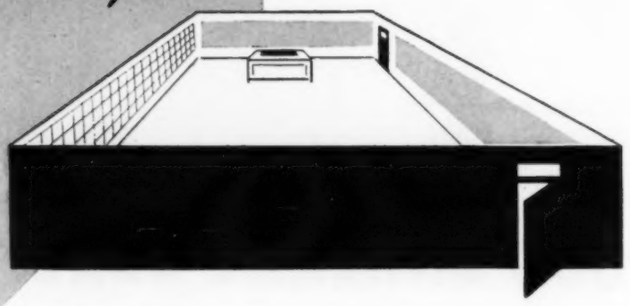

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FAIRFIELD PROMOTES STAFF PARTICIPATION PLAN IN TEACHER SELECTION

The board of education at Fairfield, Conn., during the school year 1949–50 carried out a staff participation plan for the selection and promotion of staff members, which has proved very successful.

The program has been developed through the co-operative effort of the administration and the professional committee of the Fairfield education association. Under the plan, three or more staff members take charge of the screen applications, assist with the interviews and observe in teaching situations. Qualities determined by the staff committees are watched for in the candidates. A four-point outline has been perfected for discovering these special qualities in the candidates. The final step is a meeting with the superintendent of all participating staff members. Candidates are discussed at the meeting and opinions exchanged. A final recommendation is given to the superintendent, Dr. C. G. Hoyt, who then makes to the board the recommendation of the candidates to be employed.

MARLBORO CHANGES PERSONNEL RULES

The school board of Marlboro, Mass., has adopted new rules to provide for more efficient operation and to improve the teacher morale. Significant changes were made in the rules governing the granting of increments and the absence of teaching personnel.

At the suggestion of Supt. John D. Coughlan, an old rule requiring a teacher to take a professional improvement course before receiving an increment was changed to permit the accumulation of courses at a summer school or otherwise, to count for the subsequent four years. Hereafter, teachers will not be required to take a course covering each year. They may now take six semester hours to cover each four-year period. Both travel and extensive curriculum activity may be substituted for a two-semester-hour course.

Under a new sick-leave plan, the annual sick leave has been increased to 12 days, which will be allowed to accumulate to 60. Provision was made for liberalizing leave for funerals and for attendance at the bedside of an ill member of the immediate family. In addition teachers now have one additional day each year to attend the funeral of a friend or relative where such attendance is a moral obligation. Teachers may attend an ill member of the immediate family, such absence to be charged against the annual sick leave.

NEW TEACHERS AIDED

The public schools of Boulder, Colo., under the direction of Supt. Natt B. Burbank, have expanded their program of orientation for new teachers. Experienced teachers on the school staff act as sponsors of the new personnel, and their aim is to make the new teachers feel at home and to know the community, the school system, and their jobs as promptly as possible.

A preschool workshop for teachers is held annually. During this two-day session, all new teachers are given full information covering the policies, the philosophy, and the practices of the schools. The teachers' handbook has been revised to cover all necessary information for both new and old teachers.

RICHMOND PROGRAM FOR NEW TEACHERS

The public schools of Richmond, Calif., under the direction of Supt. George D. Miner, have conducted a successful orientation program for the benefit of new teachers. Under the plan, all new teachers are called to meet a day ahead of the fall opening of the schools in order that they may greet the principals and teachers in their school, see the school itself, and become acquainted with the instructional materials available to them.

On this day, the local Commerce Association offers a welcoming luncheon for the new teachers, at which time they meet certain dignitaries from the city government, as well as supervisors, principals, and other administrators of the school system. A number of the school buses are utilized in carrying the teachers on a conducted tour of the school district to help them get acquainted with the community in which they are to work.

The public schools have worked out plans for a proposed internship training program for all new teachers. This program has been organized in conjunction with the San Francisco State College and the University of California. There appears to be a plentiful supply of secondary teachers, many of whom are interested in being retrained for elementary school teaching in places where there is a shortage of instructors. Certain students recommended by one or another of the educational institutions for teachers are accepted on a trial basis for one year. These students teach on an emergency credential and receive a regular salary for the position in accordance with the salary schedule. At the same time, they are allowed to teach under the supervision of the training institution and are given credit for their practice teaching at the end of the year. The program which is in its initial stages is expected to have far-reaching results before it reaches its final stage.

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TIPS ON TEACHING TYPING

by George L. Hossfield

10-times World's Champion Typist

Let's stop hampering a beginner by requiring perfection or even near perfection at the start. We must require a degree of accuracy, of course, but let us temper our demands with leniency. The achievement of perfection is a gradual accomplishment; it should not be expected, much less required, from a beginner. Getting accustomed to stroking the keys properly, using the right amount of finger leverage, and remembering the location of the keys to be depressed — these are only a few of the things the beginner has to think about while attempting to do something that is entirely new. After a certain amount of practice a student gradually gains confidence and then you can expect an improved result. The requirement of perfection places the student under an unnecessary tension and strain, which in itself will defeat a student's best intentions. Tension and strain have ruined the chances of more than one trained professional operator so let us not expect the impossible from the untrained beginner.

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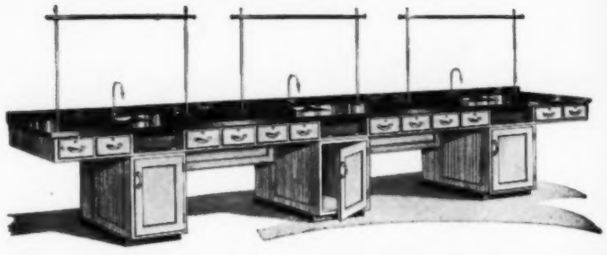

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WRITE FOR FREE CATALOG TODAY

FORM CITIZENS' COMMITTEE

The board of education of Siloam Springs, Ark., with the co-operation of Supt. Wayne H. White, has taken steps for the formation of a citizens' committee, which is to undertake a study of the school program, to suggest improvements needed, and to provide means of securing financial support for the proposed improvements. A number of subcommittees will be appointed to study various problems and to report to the citizens' committee. Among the problems to be studied are curriculum changes, a building program, health and physical education activities, and a recreation program. In the study the committee will be assisted by members of the staff of the College of Education, University of Arkansas.

NEW YORK STATE OBSERVES ANNIVERSARY OF FIRST CENTRAL SCHOOL DISTRICT ORGANIZATION

On June 26, 1950, at Albany, N. Y., the State Education Department celebrated the twenty-fifth anniversary of the establishment of the first central school district under the central school law. The North Salem Central School District, in Westchester County, was the first district to be formed.

At present, there are 395 central school districts in operation, serving 275,000 pupils. Approximately 80 per cent of the state considered suitable for centralization has been centralized. About 6000 former nonurban districts are included in the 395 central districts. There remain in the state about 3000 common and union free districts, with an enrollment of 190,000 many of which may wish to join in central districts, and others which may become parts of an adjoining city system. About half of these districts operate their own schools and the remainder contract with neighboring districts for the education of their children.

State financial aid to central school districts has reached the sum of nearly $40,000,000 annually.

To date, 344 central school districts own and operate their own transporation facilities, with a combined fleet of 2000 buses. In many central school districts expenditures in excess of $30,000 a year are required for transportation alone.

PLANS LOW-COST BUILDING

The village of New Lexington, in Perry County, Ohio, has received bids for a 14-classroom elementary school and a gymnasium-playroom, at a total cost of $255,989. To be added to this is the cost of landscaping, the engineering fees, and miscellaneous fees, bringing the total cost to $290,000. The cost, broken down, amounts to $9.74 per square foot, or 64 cents per cubic foot, including all mechanical items. This is considered economical, when compared with a cost of $16.60 per square foot, or $1.10 per cubic foot, in other communities of the state. The plans and specifications were prepared by Joseph Baker, Newark, Ohio.

PROGRESS AT HURON, SOUTH DAKOTA

A busy year of service has been the experience of the board of education of Huron, S. Dak., a thriving city of 13,000 inhabitants. These school-minded businessmen have taken the time to attend 35 regular and special board meetings, in addition to much time consumed in making plans for the erection of a new building and the selection of a new superintendent.

The total attendance for these 35 meetings was 95 per cent. Dr. R. A. Buchanan totaled 33; Carl Grothe, vice-president of the board, made 33; John Sauer attended 100 per cent, and Jim Venables was present for 34 meetings. Peter Thielen, who works on the night shift at the railroad, was able to attend 32 sessions. This is a commendable record. These men, with officers carrying over, will be on the job for the 1950–51 school year, with Milton Walsh as clerk.

The new school, for which contracts totaling $755,000 were let in June, has an auditorium with a seating capacity of 6500. Harold Spitznagel, Sioux Falls, is the architect.

Supt. Andrew J. Lang, who retired at the close of the school year after 25 years' service, has been succeeded by James F. Slocum, formerly of Winner, S. Dak.

SCHOOL-BUS PURCHASES

The Michigan State Department of Public Instruction has recommended to the boards of education in the state that they "should require salesmen of school buses to furnish prices and specifications on standard equipment, occupational equipment, and accessories of both bodies and chasses. Detailed specifications should be furnished on all lines of models of bus bodies offered for sale.

"Only first-class bus bodies should be purchased. Only by following this procedure can boards of education actually secure the type of equipment required."

ADOPT NEW SALARY SCHEDULE

The board of education at Steubenville, Ohio, has adopted a new salary schedule for teachers, upon recommendation of Supt. Ralph M. Gantz. Teachers with less than four years' training will receive a minimum of $2,025 and a maximum of $3,015. Teachers with a bachelor's degree will begin at $2,500 and rise to $3,670. Teachers with a master's degree will begin at $2,625 and will be paid a maximum of $3,925.

The board of education is working toward the establishment of a maximum pay of $5,000 for teachers with a master's degree. Community support is developing. For the years 1950–51 all instructors on the staff have been given an increase ranging from $75 to $275.

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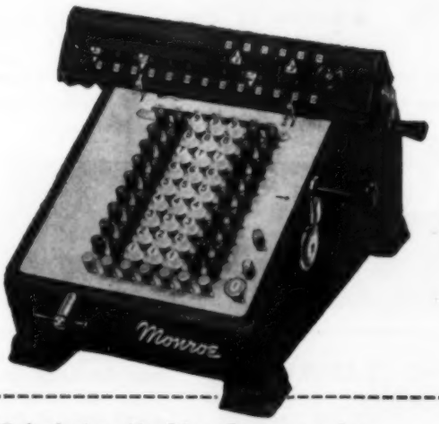

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THE FLYING CLASSROOM REPORTS

*Knight D. McKesson**

Michigan State College's unique European *Flying Classroom*, which carried 65 top American school administrators for a six-week study of 11 European nations, returned to the United States, May 22.

The stratocruiser which brought them back from London may have been loaded like a Christmas stocking with gifts and souvenirs, but, more important, it brought back a brimming parcel of on-the-spot learning. This was firsthand knowledge that, according to plan, was to spread as widely as possible to every state in the union.

Leading high school, college, and government educators from 41 states were on the trip, first of its kind attempted by an educational institution. Their objective — to see for themselves the actual conditions of Western Europe, and, to the best of their abilities, to pass on this knowledge to anyone who would lend an ear.

Comprehensive reports are not yet available on the over-all trip, but preliminary conferences in London and New York have supplied an indication of the results of this study, during which educators are again students, and people, not text books, are studied.

Members of the *Flying Classroom* returned convinced that on-the-scene education is the only way to study Europe. They are sure that Europe really would be on its uppers if it were not for Marshall aid. They know that the Marshall plan has contributed greatly to halting the inroads of Communism in Western Europe (and they feel the greatest danger is past).

They agree that if the recovery of Europe — western Europe at least — is to continue, the United States must become a good, conscientious importer and that something must be done about high United States tariffs and their effect upon European trade.

But the important fact about these American educators is that they returned loaded with new, more authoritative ideas. Knowing a given number of established facts, they agree, doesn't answer the question of education and modern Europe, which now is a constantly changing Europe.

Leroy Vogel, chief of the education branch of the United States Occupation Forces in Germany, said that "one of the biggest problems in the occupation of Germany is the attempt to broaden and liberalize their educational curricula."

"The Germans have a strong capacity for academic education, but what they need now is practical education, not philosophical study," he added.

Dr. Charles L. Anspach, president of Central Michigan College of Education, agreed: "The German school system is a classical temple which turns out textbooks instead of citizens. In primary and secondary schools, nine years of Latin and seven years of Greek are required. If you get to the universities, you are taught English."

There is another facet of European culture which must be considered before this pioneering tour can be fully appreciated. Under the chairmanship of E. W. Rushton, superintendent of schools, Orangeburg, S. C., "how the people live" is a subject which cannot be neglected.

This group has found that the European family — bar none — continues to be a basic institution and not a past participle as it is becoming in America. And this group believes that through this institution Europe has built a backbone which will not be broken by any attempts at political disintegration.

In Europe they found a self-contained family in which enjoyment was found more within the family than through outside sources, according to Mr. Rushton. The ancient religious and social ideals of the permanence of marriage, the lack of laborsaving devices (which keeps the children busy), the shortage of transportation (which keeps everyone at home) and consequently the necessity for home entertainment have created a structure which Nazism was unable to break down, Mr. Rushton said, and which promises to live through any threats of Communism now being thrown at it.

The reports of the various groups thus far have been superficial in one sense of the word, the educators agree, but through questionnaires distributed by the Michigan State College staff, a complete summarization of the trip soon will be compiled and distributed. But Dr. Horn, originator of the *Flying Classroom*, emphasizes the fact that the only prerequisite to accepting the invitation to take this first European tour was to carry the story to educators of every state — and 41 states were represented.

*Special Correspondent of the *Lansing State Journal*, who was the only newspaperman aboard the *Flying Classroom*.

UNIFORMITY FOR ATHLETIC ADMINISTRATION

(Concluded from page 42)

9 pay for this service; 1 community receives this service free; and 1 community pays the hospital direct.

Home calls by physicians are not paid in 13 communities; they are paid in 5 communities; 1 community pays for some calls; 1 school system pays for the initial call.

In 14 communities the board insures the physician during the performance of his duty; 15 schools do not insure; in 13 communities he is covered by automobile liability insurance; in 10 he is not so covered. One school pays insurance for out-of-town trips; 14 schools do not insure the physician to and from his office to the place of sport; 8 insure him; 3 depend on the physician's personally carried insurance; 1 school finds that the school insurance cannot cover the doctor.

Need of Team Physician

Many communities believe that the plan of using the school medical inspector in connection with athletic injuries works very well. It is the author's belief that a physician should be present at all games and that the board of education should think of the students first.

Where a team physician is employed, the board of education should set up definitely (1) the term of service; (2) the duties included, especially (*a*) attendance at sport activities, (*b*) the examination of athletes and candidates, (*c*) emergency treatment, (*d*) emergency calls, (*e*) reports of cases, and (*f*) the character and number of home calls. (3) The board of education should determine whether the salary is to include only the period of the sport season, (*a*) whether it is to include office calls, (*b*) home calls, and (*c*) X-ray and other special services. (4) The extent and the type of insurance of the doctor as an employee of the board of education should be studied. (5) The physician should be made responsible for his conduct as team physician to the board.

The basic idea of insuring athletes is still a debatable question. In the writer's opinion, it seems logical that the school authorities provide reasonable insurance coverage for selected participants in sports, at least to the extent of one half the premium.

SCHOOLROOM LIGHTING LEVELS

(Concluded from page 32)

seeing standpoint, they may still be desirable for the other reasons given.

If the IES level is unscientific and without foundation, then what is the value of saying, as Dr. Almack does, "The safest estimate in specific terms is probably the mean between the minimum of a quarter of a century ago and that advocated lately by the Society of Illuminating Engineers"?

In summary: There is no scientific information which enables us to peg the proper minimum illumination level at an exact point.

There is much scientific support for higher levels when economic conditions permit, and none for holding to low levels.

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NEWS OF SCHOOL BOARD OFFICIALS

► The school board at Holland, Mich., has reorganized for the 1951 school year with the election of ALBERT E. LAMPEN as president; ERNEST V. HARTMAN as vice-president; and JOHN OLERT as secretary.

► The school board at Kenmare, N. Dak., has reorganized with W. L. MCCLUNG as president; DR. R. T. GAMMELL as vice-president; SUPT. E. C. JOHNSON as clerk; and F. J. RUNDLETT as treasurer.

► The school board at Rapid City, S. Dak., has elected DR. W. A. DAWLEY as president; LOU VIDAL as vice-president; and SAM GLAIM as secretary.

► MATHEW STUKEL has been elected president of the board at Ely, Minn.

► The school board at Grafton, N. Dak., has reorganized with DR. GEORGE COUNTRYMAN as president; W. E. WILLIAMS as vice-president; and JOEL MYERS as clerk.

► The Yankton, S. Dak., school board has reorganized with MRS. JUNE MCVAY as president; R. R. TINCHER as vice-president; and ERNEST MYERS as clerk. DR. R. F. HUBNER is the new member of the board.

► PAUL HORN has been re-elected president of the board at Moorhead, Minn.

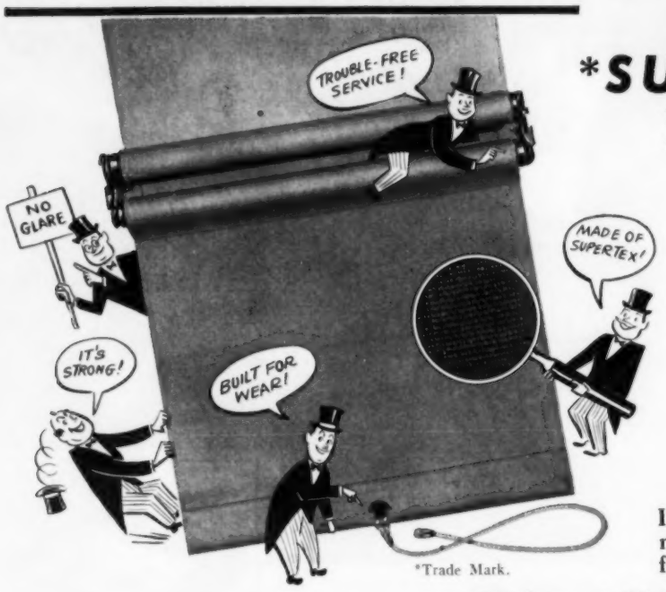
► IVAN N. SEIBERT, of Guthrie Center, Iowa, has resigned to accept the position of supervisor of transportation in the State Department of Public Instruction.

► DALE L. THOMPSON has been elected president of the board of education at Beloit, Wis. MRS. BERT H. WATERMAN was elected vice-president; and BURTON T. WILLIAMS was re-elected as secretary. New members of the board are WILLIAM L. GOERS and RAYMOND O. FISH.

► The school board at Bismarck, N. Dak., has reorganized with T. W. SETTE as president, and WARNER QUALE as vice-president. DOROTHY MOSES was re-elected as secretary, and A. A. MAYER as treasurer.

► GEORGE WRIGHT has been elected president of the board at Casper, Wyo.

IF YOU EXAMINE



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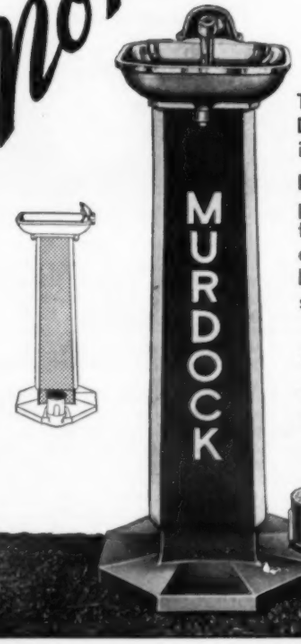

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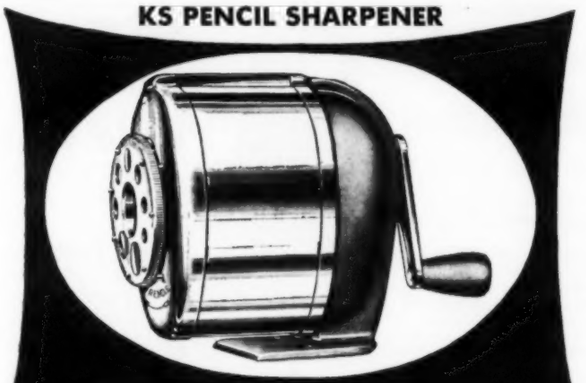

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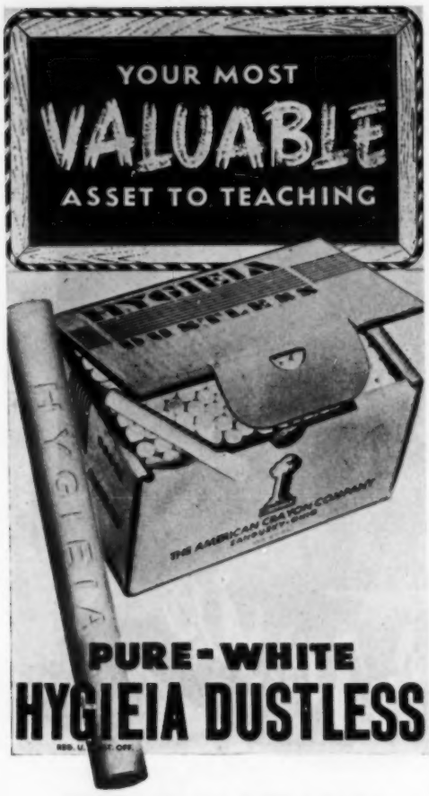

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A CAREER DAY AS PUBLIC RELATIONS

(Concluded from page 22)

tray the school for the radio community.

All these are special ways for furthering public relations. But, there are other ways which are not branded in such a definite manner and yet all of us know they are important and we work hard at managing these situations in the right way. What about the notes which go home from school? The conferences with parents when, perhaps, the situation is not exactly a pleasant one? The teacher's place in community work? The attitudes of teachers when speaking of colleagues?

We all hope that our every human contact is so well managed that no one can doubt that teachers are the kind of people to whom his children should be entrusted. If so, then our job of public relations is truly well done.

TRAINING SCHOOL MAINTENANCE MEN AND CUSTODIANS

(Concluded from page 25)

employ persons of higher caliber than those who were formerly employed. And they appreciate too the tremendous saving in time and money which janitors who are skillful, alert, ambitious, and resourceful can make for the schools. These abilities are acquired only through training.

At the conclusion of each zone school, appropriate exercises are conducted and each janitor who has had perfect attendance during the course is presented with a Certificate of Merit.

NEWS OF SCHOOL BOARD OFFICIALS

► The Winn parish school board at Winnfield, La., has reorganized with L. M. THOMPSON as president, and FRED MIXON as vice-president.

► The school board at Cody, Wyo., has reorganized with CARL KRUEGER as president, and MRS. ELBERT SIDLE as vice-president.

► C. T. HANSON has been elected president of the board at Hillsboro, N. Dak. Other members of the board are DR. J. J. BREEN, MRS. CHARLES H. SHAFER, JAMES A. ALLEN, and HAROLD ANDERSON.

► EARL NELSON has been elected president of the board at Stanley, N. Dak. F. B. TAYLOR was elected clerk.

► C. M. IRVIN has been elected a member of the board at El Paso, Tex.

► The Munising township board of education at Munising, Mich., has been reorganized with THEODORE TUNTERI as president; MRS. LUSSETTA L. TATE as secretary; BENJAMIN L. ZASTROW as treasurer. Two other members are KEITH G. CLEMENT and MRS. BARBARA SYMON.

► The school board of Bismarck, N. DAK., has elected T. W. SETTE as president, and WARNER QUALE as vice-president.

► MRS. ELLA M. DARLING has been re-elected as a member of the board at Selma, Calif., for a second three-year term.

► The board of education of Berkeley, Calif., has reorganized for the school year 1951 with A. K. SACKETT as president, and MRS. EILEEN A. READY as vice-president. Both Sackett and Mrs. Ready have served continuously for the better part of a decade.

All-weather playgrounds now possible for every school at less than $1.00 per square yard. . . . Improve the health and phy. ed. program with an outdoor gymnasium of smooth, dry, resilient NATURAL ROCK ASPHALT. Your surfacing costs can be cut in half. CONSULTING SERVICE. Program planning, with the aid of school employees. Efficient space utilization for health and physical education activities.
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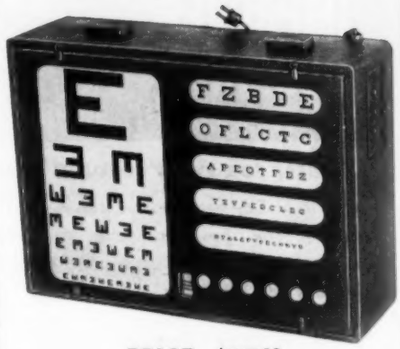

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NEW SUPPLIES AND EQUIPMENT

ISSUE NEW BOOKLET ON CLEANING

The Spencer Turbine Company has issued a 32-page booklet, "Guide to Easier Cleaning," describing the use of the Spencer vacuum cleaning system in schools and educational institutions. A feature of the Spencer cleaner is the self-contained dirt-disposal bag which collects all dirt and dust and disposes of it. The Spencer commercial portables are adapted for both wet and dry pickup and they can be used for both suction and blowing. The firm has records of 2500 schools which are using Spencer Stationary built-in vacuum-cleaning systems.

A copy of the booklet can be obtained by writing to the *Spencer Turbine Co., 468 New Park Ave., Hartford 6, Conn.*

For brief reference use ASBJ—0901.

NEW CRAYONEX CRAYONS

The American Crayon Company has announced new Crayonex crayons for children of preschool age, which offer graphic expression for children seeking to express themselves through pictures and the use of crayons.

Crayonex crayons are made to school specifications. They are nontoxic, their colors satisfy the child, and their easy-marking qualities match his spontaneity. For preschool ages the regular eight-stick box No. 3 is offered. Up to seven years of age 12 colors are considered sufficient, such as No. 4. From there on the child progresses to Box No. 326 with 32 colors, which is useful for young children as well as advanced students and craftworkers. The new flat, lift-lid box No. 323 contains 24 colors. The firm offers to send a colorful folder telling how to use Crayonex crayons for different techniques.

A copy of the folder can be obtained by writing to *Dept. M., The American Crayon Company, Sandusky, Ohio.*

For brief reference use ASBJ—0902.

NEW EDITION OF PROGRESSIVE INDEXING AND FILING

Remington Rand, Inc., has announced the fifth edition of its handbook "Progressive Indexing and Filing," which explains the classifying and arranging of records for a business office or individual. Like its previous editions, the new book covers various systems in filing and includes a new chapter on micro-filming. Indexing, charge methods, cross reference, transferring, follow-up, equipment, supplies, and card records also are covered. The book has been reduced in page area to standard-textbook size and increased in thickness.

For complete information write to *Remington Rand, Inc., 315 Fourth Ave., New York 10, N. Y.*

For brief reference use ASBJ—0903.

NEW HUNTINGTON FLOOR SEALING METHOD

The Huntington Laboratories have announced a new 16mm. sound motion picture entitled "Scientific Floor Sealing," which describes and illustrates step-by-step scientific methods for sealing and caring for wood floors.

"Scientific Floor Sealing" is unique in educational films. In addition to presenting important factual information, it possesses unusual human interest because it features Tommy Thompson, the dean of the nation's maintenance engineers, and tells about special methods of floor maintenance. The film shows how to prepare the floor for sealing as well as demonstrates the actual application of the seal. It explains how to remove old seals quickly and how to be sure the floor is properly prepared for the new finish.

The sound film has a running time of 29 minutes and can be obtained on request from the *Huntington Laboratories, Huntington, Ind.*

For brief reference use ASBJ—0904.

PLANNING SCHOOL LABORATORIES

The Laboratory Equipment Section of the Scientific Apparatus Makers Association has issued a suggestive pamphlet entitled, "Here's the Simple, Safe, Sure Way to Plan and Purchase Laboratory Facilities."

The suggestions here made take into account the special conditions which must be kept in mind in planning and equipping school laboratories in various types of organization and at varying school levels. The suggestions are based on recommendations of laboratory designers and engineers of the leading specialized manufacturers and take into account also the illumination, the cost of the equipment, the general design of the proposed school building, and the long-range service which equipment should give.

A copy of the pamphlet may be had by school authorities upon request by the *Equipment Section of the Scientific Apparatus Makers Association, 20 North Wacker Drive, Chicago 6, Ill.*

For brief reference use ASBJ—0905.

SCHOOL BUILDINGS

The Timber Engineering Company, Washington, has issued a pamphlet discussing the construction of school buildings of wood frame construction, emphasizing the factors of safety and economy.

Tabulations of typical California schools, built of lumber and intended to overcome the dangers of earthquakes, are given together with illustrations and descriptions of buildings in the Middle West, erected for economy and safety against fire and windstorms.

The booklet promotes the Teco Connector system of truss and roof construction.

Copies are available from the *Timber Engineering Co., Washington 6, D. C.*

For brief reference use ASBJ—0906.

WAYNE PORTABLE STEEL GRANDSTANDS

The Wayne Iron Works has announced its new Type "H" portable steel grandstand, which costs only slightly more than ordinary wooden bleachers. A booklet has been issued, describing and illustrating the Type "H" portable steel grandstand and including a table of dimensions.

The stand is available in several variations to permit a style which meets the user's particular requirements. Light in weight, the Type "H" is adaptable to a wide variety of conditions. The steel understructure conforms to inequalities in the ground and eliminates the necessity of extensive grading. Complete dismantling of the stands is unnecessary because they can be disconnected in units, and the units moved bodily to a new location. Full provision is made for the comfort and safety of the occupants.

A copy of the catalog can be obtained by writing to *Wayne Iron Works, Wayne, Pa.*

For brief reference use ASBJ—0907.

ANNOUNCE "FOAMGLASS," NEW INSULATION MATERIAL

A new 36-page booklet entitled, "PC Foamglass," describing a new long-life insulation material for commercial, industrial, and public buildings, has been issued by the Pittsburgh Corning Corporation.

This booklet contains the complete story of "PC Foamglass," with new information concerning the installation of the material in floors-on-ground, the use of the material as wall lining, as a material for free-standing interior walls, and as ceiling insulation.

There is also a description of the new line of trowel finishes which can be applied directly to PC Foamglass.

A copy of the booklet can be obtained by writing to the *Pittsburgh Corning Corporation, 307 Fourth Ave., Pittsburgh 22, Pa.*

For brief reference use ASBJ—0908.

HILLYARD OFFERS TEACHING MATERIALS

The Hillyard Chemical Company has prepared a folder of teaching materials, to assist school-business executives prepare job specifications for floor maintenance, and to instruct operating personnel for performing maintenance operations.

The Job Specifications booklet for executives includes complete technical djrections for preliminary treatment, finishing, and maintenance operations for terrazzo, cement, wood, linoleum, asphalt, quarry tile, rubber, and masonite floors. A special section is devoted to the refinishing and maintenance of wood gymnasium floors.

The specifications include practical information concerning the coverage of various materials, the daily cleaning operations, the periodic scrubbing, the removal of old materials, etc.

The Hillyard Handy Maintenance Manual consists of complete step-by-step directions for daily and special cleaning and refinishing of floors. The information includes directions for sweeping, mopping, scrubbing, buffing, and varnishing of several types of school floors. The Manual can be used directly by janitors.

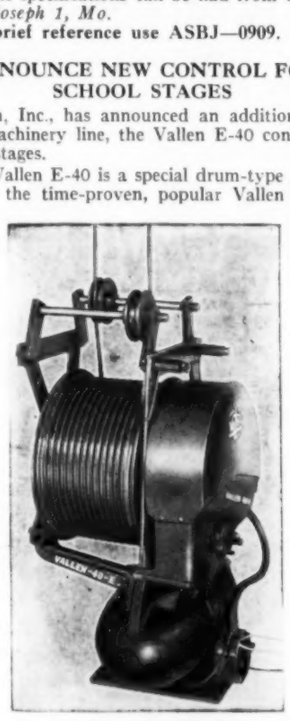
The Hillyard folder of floor finishing and treatment specifications can be had from the firm at *St. Joseph 1, Mo.*

For brief reference use ASBJ—0909.

ANNOUNCE NEW CONTROL FOR SCHOOL STAGES

Vallen, Inc., has announced an addition to its stage machinery line, the Vallen E-40 control for school stages.

The Vallen E-40 is a special drum-type adaptation of the time-proven, popular Vallen No. 40



Vallen Stage Curtain Control.

Junior Curtain control. Designed for operation of smaller curved tracks and for special situations where no standard curtain control is used, it provides the slack cable required in the operation of curved tracks. It starts, stops, and reverses at any point of travel by the use of a simple one-button, 2-wire control.

Complete information can be obtained from *Vallen, Inc., Akron, Ohio.*

For brief reference use ASBJ—0910.

THE IBM ELECTRIC TYPEWRITER

The International Business Machines Corporation is offering a special reduced price for IBM electric typewriters used by schools for instruction purposes. To acquaint interested school people with the advantageous features of the typewriter, a literature kit is available on request.

The "IBM Typing Guide" describes operative features of the machine and discusses principles of good typing and a practice plan for achieving typing speed and accuracy. A chart is offered contrasting several features of the manual and IBM electric typewriter keyboards.

For complete information write to the *IBM Advertising Department, 590 Madison Ave., New York 22, N. Y.*

For brief reference use ASBJ—0911.

MOORE LEAVES KANSAS CITY

On August 3, 1950 the Kansas City, Mo., board of education took action by a vote of 4 to 2 to dismiss the superintendent, Dr. Harold E. Moore. This was done with only a month's notice. No reasons were given; no hearing was held, and the matter had never been discussed officially in the board until the meeting when the dismissal took place.

In a conference by the four members voting to dismiss, with the superintendent late in the afternoon of the meeting, issues around the school term and the North Central Association action were discussed. The members contended that the board of education policies had not been carried out by the superintendent. The superintendent had insisted that there were funds which should be spent to keep the schools open to maintain their accreditment with the Missouri State Department of Education and the North Central Association. Later developments have established these facts, since the school district books were closed with between $900,000 and $1,000,000 in cash assets available to the board, and only $600,000 or $650,000 would be necessary to operate the three additional weeks required to maintain the necessary term.

Actually, the issues mentioned above were the given ones, and basic to the problem were those pressures and issues facing the schools in every metropolitan community. After some legal negotiations the board met on August 22 and rescinded its action and reinstated the superintendent. The superintendent then offered his resignation and a settlement was made on his contract which was valid and had until June 30, 1951 to run. The rescinding action established the fact that the dismissal was illegal and without cause.

Superintendent Moore issued the following statement: "Regardless of the action of the board in rescinding its action of August 3, 1950, I could not effectively or with clear conscience carry out certain policies of the Board majority in regard to finance and personnel. Therefore, I am submitting my resignation and effecting a settlement on my contract. This step is being taken in order to permit me to make other professional connections and to allow the Kansas City Schools to take whatever steps are necessary in regard to their organization."

SCHOOL BOND SALES

During the month of July, school bonds were sold, in the amount of $106,255,564. The largest sales were made in California, $7,092,000; Maryland, $19,627,000; New York, $15,644,700; Ohio, $6,235,694; Illinois, $5,530,000; Louisiana, $7,225,000; Michigan, $6,966,000; Connecticut, $3,620,000; Massachusetts, $3,901,000; Texas, $3,346,000. The average price of twenty bonds, as of July 1, was 2.00 per cent.

During July, short-term paper and refunding bonds were sold, in the amount of $854,800.

► Amarillo, Tex. The school board has adopted a budget of $2,875,695 for 1950–51, which is an increase of $416,520 over 1949–50. The board has increased the present interest and sinking fund levy from 31 cents to 32 cents.

Advertisers Products and Services

Advertisers in this index are given a code number in addition to the page number on which the advertisement appears. Refer to the advertisement for product or services available. Write direct to advertisers or use the coupon in requesting information from a number of advertisers..

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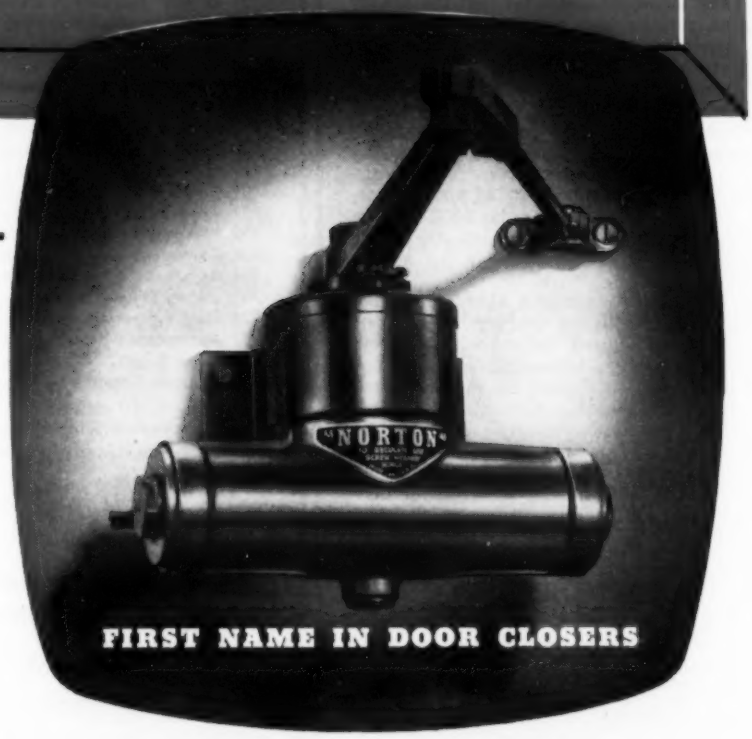

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